



DERMATOLOGICAL NURSING

June 2016 Vol 15 Issue 2

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Reference: 1. <http://www.bad.org.uk/site/796/default.aspx>

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1. Preference study, September 2013. Data on file. 2. Preference study, August 2014. Data on file.

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Cetraben® Emollient Bath Additive Light Liquid Paraffin Please refer to Summary of Product Characteristics before prescribing. **Presentations:** Bath additive – Clear liquid containing light liquid paraffin 82.8% w/w. **Indications:** Symptomatic relief of red, inflamed, damaged, dry or chapped skin, especially when associated with endogenous or exogenous eczema. **Dosage:** Bath additive – Adults: Add one or two capfuls; Children: add half/one capful to a warm water bath or apply with a wet sponge to wet skin before showering. **Contra-Indications:** Hypersensitivity to any of the ingredients. **Special Warnings and Precautions:** Care should be taken if allergy to any of the ingredients is suspected. Care should also be exercised when entering or leaving the bath. Avoid contact with the eyes. **Side Effects:** Very rarely, mild skin reactions have been seen **Marketing Authorisation Numbers:** Cetraben Emollient Bath Additive: PL 06831/0260 **Basic NHS Price:** £5.75 **Legal Category:** GSL. **Date of Preparation:** November 2015. **Further Information is available from:** Genus Pharmaceuticals Ltd, Linthwaite, Huddersfield, HD7 5QH, UK. Cetraben® is a registered trademark. CETBA.API.V11.

Cetraben® Cream Presentation: A thick white cream. **Main ingredients:** White soft paraffin 13.2% w/w, Light liquid paraffin 10.5% w/w. **Indications:** An emollient, moisturising and protective cream for the symptomatic relief of red, inflamed, dry or chapped skin, especially when associated with eczema. **Dosage and Administration:** Adults, the elderly and children: Apply to dry skin areas as often as required and rub in. **Contraindications:** Hypersensitivity to any of the ingredients. **Precautions:** For external use only. May cause local skin reactions. Avoid contact with eyes. Do not use if allergic to any of the ingredients. Children under 1 year should be treated under medical supervision. **Pregnancy and breastfeeding:** Using Cetraben Cream during pregnancy and breastfeeding is unlikely to have any ill effects. If unsure, talk to your doctor or pharmacist. **Side effects:** Mild allergic skin reactions. **Pack size:** 50g, 150g, 500g, 1050g Rx packs, 50ml, 200ml & 500ml (with 475ml fill) OTC packs. **Trade Price:** 50g: £1.40 150g: £3.98 500g: £5.99 1050g: £11.62 50ml OTC: £3.00 200ml OTC: £4.80 500ml (with 475ml fill) OTC: £7.25 **Medical Device:** Class I. **Legal Manufacturer:** Thornton & Ross Limited, Huddersfield, HD7 5QH, UK. **Date of preparation:** 13.05.2016.

Cetraben® Lotion Presentation: A smooth white lotion. **Main ingredients:** White soft paraffin 5.0% w/w, Light liquid paraffin 4.0% w/w. **Indications:** For the relief of the symptoms of eczema, dermatitis and other dry skin conditions. **Dosage and Administration:** Adults, the elderly and children: Apply to the skin and gently rub in until absorbed. Use as often as required, or as directed by your doctor or pharmacist. **Contraindications:** Hypersensitivity to any of the ingredients. **Precautions:** For external use only. Do not swallow. Avoid contact with eyes. May cause local skin reactions. Talk to your doctor before use if the skin is badly cracked, infected or bleeding. Do not use if allergic to any of the ingredients. **Pregnancy and breastfeeding:** Using Cetraben Lotion during pregnancy and breastfeeding is unlikely to have any ill effects. If unsure, talk to your doctor or pharmacist. **Side effects:** Mild allergic skin reactions. **Pack size:** 200ml & 500ml Rx packs, 50ml, 200ml & 500ml (with 475ml fill) OTC packs. **Trade Price:** 200ml: £4.00 500ml: £5.64 50ml OTC: £3.00 200ml OTC: £4.80 500ml (with 475ml fill) OTC: £7.25 **Medical Device:** Class I. **Legal Manufacturer:** Thornton & Ross Limited, Huddersfield, HD7 5QH, UK. **Date of preparation:** 05.11.2015.

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DERMATOLOGY

DERMATOLOGY NURSING IN BRAZIL: REALITY, CHALLENGES AND PERSPECTIVES

Maria Helena Sant Ana Mandelbaum



Maria Helena Sant Ana Mandelbaum is President of SOBENDE, the Brazilian Society of Dermatology Nursing (2013-2016)

Brazil has a population of 200 million inhabitants and an extensive, diverse geography, which presents numerous challenges to healthcare services. Dermatological disease represents one of the country's major public health problems, with high incidence and prevalence of conditions such as leprosy, leishmaniasis, skin infections and parasitic diseases. There is a deficit between the skin health needs of the population and the availability of services, in particular dermatology nursing services¹. Dermatology is an emerging area and, in the growing quest for specialisation and expertise, it is one of the nursing specialities recognised by the Federal Council of Nursing (COFEN)².

Historically, dermatology nursing in Brazil in the 1970s and '80s focused on the daily practice of skin care and performance in basic care programmes, such as leishmaniasis and leprosy. In 1984 a group of nurses shared experiences among health and education institutions and formed the GEDE (Clinical interest in dermatology nursing group), coordinated by nurse Lina Monetta with support from the Brazilian Nursing Association (ABEn)³.

In 1998, the GEDE became the Brazilian Society of Dermatology Nursing (SOBENDE). In 2001 it held its first conference and then, working in partnership with public institutions, developed the first graduate courses to create dermatology nurse specialists. SOBENDE is governed by federal law and works with several nursing organisations to regulate the training of professionals, contributing to the quality of health care in Brazil. The title of Nurse Specialist in

Dermatology Nursing can only be awarded by SOBENDE. SOBENDE also developed the Continuing Education Programme in dermatology nursing — PEPEDS — which enjoys the support of and collaboration with educational and care professionals, as well as skin- and wound-related technology companies.

In 2008, SOBENDE contributed to the production of the 'Brazilian guidelines for preventive and therapeutic nursing care in wounds', a Federal Council of Nursing initiative that involved nurses from all over Brazil. By 2015 Brazil had 79 specialist dermatology nurses. To date SOBENDE has conducted more than 125 scientific meetings, bringing knowledge and training to enhance the quality of professional nursing. SOBENDE also works with various campaigns, such as the Brazilian Society of Dermatology's campaign to prevent and detect skin cancer, and the Dermacamp Project, an innovative programme to help children and adolescents with severe dermatoses to integrate and enjoy a better quality of life⁴.

In 2014 SOBENDE relaunched *Pelle Sanna* ('Healthy Skin') as a quarterly journal, its objective to promote the dissemination and exchange of knowledge in skin care (wounds and dermatological diseases) and in the area of facial and body aesthetics and care. Features are also published on podiatry, dermatological surgery and dermatological therapies, for example phototherapy, laser therapy and nursing care.

Globally SOBENDE is part of the international board of the Dermatology Nurses' Association (DNA), an organisation that brings together dermatology nursing in the USA and Canada. Following groundbreaking developments at the 2015 World Congress of Dermatology (WCD) in Vancouver — at which the DNA and International Skincare Nursing Group (ISNG) jointly staged an historic nursing scientific

meeting and inaugural global dermatology nursing leadership summit — Brazilian nurses will be participating in the scientific programme at the next WCD in Milan, in 2019. They will share information on the skin cancer prevention campaign, the Dermacamp Project, and prevention of amputations arising from diabetes, leprosy and tropical diseases.

Today, our biggest challenges are expanding the membership of the SOBENDE, increasing specialist dermatology nursing courses and creating a career plan for the specialist in public and private health institutions, focusing activities on the promotion of health and prevention of skin lesions. Another challenge is establishing the competence of the dermatology nurse specialist with COFEN. There is much work to be done in educating children and adolescents about skin health, skin cancer prevention, and self-care with adherence to treatments of severe and chronic diseases including psoriasis, atopic dermatitis and EB.

The challenges are great but the prospects are good. In a Brazil with an increasingly urbanised population, with vast social and economic disparity, where dermatology diseases are serious health problems, dermatology nurses can make a huge contribution to informing, guiding, educating and assisting people and their families. **DN**

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References:

1. Netdoctor.co.uk and AVEENO® Dry Skin study – February 2008 (n=133 participants at Week 2).
2. Double-blind, randomised, comparative clinical study, using AVEENO® Cream, 50 subjects, 2010.
3. Nebus J et al. Alleviating dry, ashen skin in patients with skin of colour. JAAD 2004; 50(issue 3 supplement):P77.

Date of preparation: July 2015
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BEHIND THE SCENES OF THE EDITORIAL BOARD: HELLOS AND GOODBYES

Karina Jackson



Karina Jackson is a Nurse Consultant at St John's Institute of Dermatology, Guy's and St Thomas' NHS Foundation Trust, and Consultant Editor of Dermatological Nursing

Dermatological Nursing (DN) is your members' journal. It is one of only two journals produced specifically for dermatology nurses globally. We are very proud and privileged to be in this leading international role and take the responsibility seriously. With the development of online access our journal is likely to become more accessible to a global audience and thus it is critical the quality of our material is maintained at a high standard. The production of *Dermatological Nursing* is led by a core editorial team, namely myself as Consultant Editor; Julie Van Onselen as Editor; Julia Pearey our Managing Editor who pulls everything together each quarter; and Christos Mais, our Art Director and illustrator.

In the background, we rely significantly on the voluntary work of our expert Editorial Board (see full Editorial Board members' list on page 4). The board provides steer to help us continually meet the needs of our members and keep us abreast of healthcare developments relevant to our readers. They help us target our commissioning of clinical features and are frequently involved in the peer-review process of clinical and research articles. To ensure a strong and sustainable future for the journal, it is important to have a fully representative and relevant mix of expertise on the board. We have recently overseen some changes to the Editorial Board

to allow for succession planning and to strengthen internal governance. We would like to express our sincere gratitude to those board members departing this year. Su Robertson (CNS) and Geeta Ayer (CNS) are both stepping down after many years of hard work on the DN board. Geeta also took on the role of joint editor of the journal for a number of years. Julia Schofield MBE, dermatologist, and Jennifer Viles, formerly working for The Vitiligo Society, have also stepped down. And our original board member and co-founder of the BDNG, Lyn Stone, is retiring from the board after 19 years' involvement.

We are also excited to announce several new members to the board and warmly welcome them into the fold. Following our annual editorial board meeting in 2015 and subsequent announcement at Conference, we have recruited two nurses relatively new to dermatology. They are: Michelle Ogundibo (paediatric CNS) and Jackie Tomlinson (adult CNS). We are keen to nurture new talent and also hope that Jackie and Michelle will be able to give the editorial team insight into the needs of nurses new to the speciality so that we can, in turn, shape our journal content accordingly while continuing to provide interest to our more experienced members.

We are also thrilled to announce that we have two dermatologists joining our board: Dr Ibrahim Nasr and Prof Mark Goodfield, who are both extremely experienced clinicians, educators and researchers.

The inclusion of other disciplines on our board is incredibly valuable and provides a more rounded and integrated approach to our features,

which reflects real-life practice. We already have a pharmacist, psychologist, podiatrist and nurses from primary and secondary care and education/research contributing to the journal board.

Additionally we have new patient organisation representation on the board. Mandy Aldwin and Sarah Griffiths-Little from the Ichthyosis Support Group are sharing this position and are happy to be working with the BDNG in an advisory capacity.

Finally we have two very experienced dermatology nurses joining, who are both also previous Presidents of the BDNG so have a good insight into the BDNG's membership and strategic goals. Karen Stephen has extensive clinical experience and expertise in photodermatology, and Carrie Wingfield is a strong advocate for advanced nurse practice, especially in skin surgery.

We feel very positive about the configuration of our new board and hope this will be reflected in the quality of the journal in forthcoming editions. That said, we are always keen to hear from members directly on what they would like to see in the journal and are interested to hear from any prospective authors (see our authors' instructions on page 16).

At the BDNG conference in Bournemouth this year we will be hosting a stand, so please come and visit us and let us know your thoughts about the journal (good and bad), and share any ideas you have for interesting topics or authors. Alternatively, feel free to get in touch directly with the Editor, Julie Van Onselen, by email at: dneditor@bdng.org.uk. Hope to see some of you at Conference! **DN**

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Contact with the mouth, eyes and mucous membranes and with abraded or eczematous skin should be avoided. Use of more than the recommended amount or too frequent application may cause redness, stinging and discomfort. Because of increased susceptibility to UV radiation, photosensitivity may occur during treatment. Exposure to sunlight should therefore be minimised appropriate sunscreen products with a SPF of at least 30, together with suitable protective apparel (e.g. a hat), should be used. Long-term use of clindamycin may cause resistance and/or overgrowth of non-susceptible dermal bacteria or fungi although this is a rare occurrence. Cross resistance may occur with other antibiotics such as lincocmycin or erythromycin. **Side effects:** May include acne, dry skin, erythema, seborrhoea, photosensitivity reaction, pruritus, rash, exfoliative rash, skin exfoliation, sunburn. Application site reactions such as burning, dermatitis, dryness, erythema. For a complete list of warnings and side effects, you should consult the Summary of Product Characteristics. **Legal category:** POM **Package quantity and basic NHS price:** Treclin 1% / 0.025% w/w gel, 30g at £11.94 **Product licence number:** PL15142/0249 **Marketing authorisation holder:** Meda Pharmaceuticals Ltd, Skyway House, Parsonage Road, Takeley, Bishops Stortford, CM22 6PU, Tel: 08454 600000 **Date of preparation of prescribing information:** March 2014 UK/TRE/14/0013

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UK/TRE/16/0007 Date of preparation: Jan 2016.

PSORIATIC ARTHRITIS: IDENTIFYING PATIENTS

Laura Blackler

The aim of this article is to discuss tools that can be used to identify patients with psoriasis, attending a dermatology clinic, who may have psoriatic arthritis and should be referred to rheumatology. Psoriatic arthritis (PsA) is a chronic inflammatory arthropathy, which may affect 6-42% of people with psoriasis¹. The diagnosis of psoriatic arthritis can be missed because patients do not always present with joint symptoms and instead can have inflammatory back pain, tendon inflammation (tendosynovitis), pain where the tendons meet the bones (enthesitis) or diffuse swelling of fingers or toes (dactylitis). When seeing a patient with psoriasis it is important to consider whether there are any signs and symptoms that may indicate that the patient has developed an inflammatory arthritis. The NICE guideline for psoriasis² states that an annual assessment should be offered to everyone with any form of psoriasis; the Psoriasis Epidemiological Screening Tool (PEST) is suggested. The key is that if there is a suspicion of inflammatory arthritis the patient should be referred to rheumatology for a further review. The sooner a diagnosis is made, the sooner a patient can commence treatment to manage their symptoms and prevent loss of function.

Citation: Blackler L. Psoriatic arthritis: identifying patients. *Dermatological Nursing* 2016, 15(2): 10-14

KEY WORDS

- ▶ Psoriatic arthritis (PsA)
- ▶ Inflammatory back pain
- ▶ NICE guidance
- ▶ Psoriasis Epidemiological Screening Tool (PEST)
- ▶ Rheumatology

KEY POINTS

1. 1 in 5 patients in a dermatology clinic could have inflammatory arthritis.
2. NICE guidance² – an annual assessment should be undertaken.
3. A good relationship between dermatology and rheumatology benefits everyone.

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Introduction

The aim of this article is to discuss tools that can be used to identify patients who may have psoriatic arthritis and should be referred to rheumatology. It will consider the different presentations of psoriatic arthritis; provide suggestions as to how these can be identified using a validated screening tool, and questions how these can be incorporated into a consultation in both primary and secondary care.

Background

Psoriatic arthritis (PsA) is a chronic arthropathy, which may affect 6-42% of people with psoriasis¹. It is dominated by peripheral arthritis and psoriasis, which may include inflammatory spinal disease as well as enthesitis and dactylitis³. Extra-articular features such as eye inflammation (uveitis) and gut inflammation can also be seen⁴, and it is rheumatoid-seronegative, ie rheumatoid factor is negative. PsA also impacts on quality of life (QoL) due to pain, loss of function due to joint inflammation, and fatigue. The impact on QoL for patients with PsA is greater than for patients with psoriasis⁵.

PsA can manifest in several ways; it can be a mono-oligoarthritis, an erosive and destructive polyarthritis, a spondyloarthropathy with axial involvement and enthesitis⁴. It differs from other forms of arthritis such as rheumatoid arthritis (RA) and osteoarthritis (OA).

Other types of arthritis

Rheumatoid arthritis is the commonest type of inflammatory arthritis. It characteristically affects the small joints in the hands and feet, and is symmetrical in presentation. The prevalence is higher in women than men and it is estimated that the overall minimum prevalence of RA is 1.16% in women and 0.44% in men in the UK population⁶.

Osteoarthritis is degenerative where the cartilage gradually roughens and becomes thin with the loss of joint space. The main cause of OA is age — it usually occurs in people over the age of 40 but other factors can lead to OA such as obesity or any previous joint injury.

Classification of PsA

The original classification of PsA was developed by Moll and Wright⁷ but this did not clearly discriminate between RA and PsA and therefore it was felt a better classification of PsA was needed. A large international study developed new classification criteria⁸ — the CASPAR (Classification criteria for psoriatic arthritis) (Box 1). This has been shown to be more sensitive than the Moll and Wright criteria⁹.

Demographics and epidemiology

A population-based study¹⁰ demonstrated that <10% of patients with psoriasis develop PsA over a 30-year period. The prevalence of PsA is equal between men and women, but men have more axial disease and less peripheral disease¹. Approximately 70% develop psoriasis

BOX 1

CASPAR⁸

Established inflammatory articular disease plus at least three of the following: -

- Currently has psoriasis or has a history of psoriasis
- Family history of psoriasis
- Dactylitis (Figure 1)
- New bone formation near the joint (Figure 2)
- Rheumatoid factor negative
- Nail dystrophy

BOX 2

Definitions of terms

Enthesitis — inflammation of soft tissue (ligaments, tendons or muscles) where they are inserted into the bone

Dactylitis — whole digit (either finger or toe) becomes inflamed – looks like a sausage in shape (Figure 1)

Oligoarthritis — inflammation affects 1-4 joints

Seronegative — rheumatoid factor is negative

Spondyloarthropathy — inflammation of the spine

Tenosynovitis — inflammation of the tendons

Uveitis — inflammation of the uvea or uvea tract in the eye



Figure 1

Psoriatic arthritis dactylitis in fingers. (©PAPAA)

before they develop joint symptoms. In 20% of patients joint symptoms appear first and 10% will develop both at the same time¹. There were a number of significant predicting factors for the development of PsA in psoriasis, which were found to include scalp lesions, intergluteal/perianal lesions, and nail dystrophy¹⁰.

There is a high prevalence of undiagnosed PsA in patients with a diagnosis of psoriasis. A recent study¹¹ looked at 100 patients who attended a dermatology clinic and, following a review by a rheumatologist, 29% of patients were found to have PsA.

Types of psoriatic arthritis

- ▶ Asymmetrical oligoarthritis
 - This is a common presentation

- affecting up to four joints and involves the large joints, eg knees
- ▶ Symmetrical polyarthritis
 - Another common presentation which involves a number of joints and about 50% of patients will have erosive disease
- ▶ Distal interphalangeal joint (DIP) involvement
 - This is often associated with nail psoriasis
- ▶ Axial arthritis
 - Inflammation in the spine and there is stiffness in the spine and/or neck, and the lower back is often affected
- ▶ Arthritis mutilans
 - This is a rare, severe deforming and destructive arthritis where the bone is reabsorbed.

The diagnosis of psoriatic arthritis can be missed because patients do not present with joint symptoms and instead it could be inflammatory back pain, tenosynovitis (tendon inflammation), pain where the tendons meet the bones (enthesitis) or diffuse swelling of fingers or toes (dactylitis) (Box 3). Therefore it is important to ask the right questions in order to determine whether the patient is experiencing any symptoms that may indicate that they have an inflammatory arthritis.

Inflammatory back pain vs mechanical back pain

When assessing for PsA it is important to ask about back pain. This can seem daunting, as up to 80% of the UK population will report back pain at some time¹². However, by using some simple



Figure 2

Fingers affected by psoriatic arthritis. Areas of swelling and deformed joints are typical of the condition. (©PAPAA)

BOX 3

Features of psoriatic arthritis.

Painful and swollen joints
Early-morning stiffness
Inflammatory back pain
Neck pain
Enthesitis
Dactylitis
Nail changes

questions it is possible to determine the likelihood of the patient having inflammatory back pain without it taking too much time.

Inflammatory back pain is a chronic condition (lasting more than three months), which usually starts before the age of 45 years, is gradual in onset, often wakes the patient in the early hours of the morning, is worse first thing in the morning (an important symptom) and takes time to improve — at least 30 minutes. Movement and exercise improves inflammatory back pain and it responds to non-steroidal anti-inflammatory drugs (NSAID). This may be in contrast to normal mechanical back pain, where pain first thing in the morning usually only lasts 10-15 minutes, becomes worse with exercise and later in the day.

Assessment of signs and symptoms of inflammatory arthritis

When seeing a patient with psoriasis it is important to consider whether there are any signs and symptoms that may indicate that the patient has developed an inflammatory arthritis. The NICE guideline for the assessment and management of psoriasis² advises an annual assessment should be offered to everyone with any form of psoriasis.

NICE² (section 1.2.2) states that a validated tool should be used to assess for psoriatic arthritis. One tool suggested is the Psoriasis Epidemiological Screening Tool (PEST). This is completed by the patient and uses a diagram to enable them to indicate which joints are painful, stiff or swollen, and to answer five

questions that cover some symptoms of psoriatic arthritis.

A community-based study¹³ with patients who had a diagnosis of psoriasis was conducted to select questions for creating a psoriatic arthritis assessment tool. A sample of patients was invited in for an assessment. The number of questionnaires returned was 168, and they showed that five questions were significant predictors of psoriatic arthritis, demonstrating good sensitivity and specificity, which led to the creation of PEST¹³ (Figure 3).

Annual assessment

To meet the NICE guideline² an annual assessment should be undertaken and clearly documented. The PEST tool (Figure 3) is a quick and simple way of doing this assessment. If the patient scores 3 or more a referral should be made to a rheumatologist. The PEST tool indicates that a person has a significant musculoskeletal problem, but it does not identify inflammatory from non-inflammatory arthritis or ask about inflammatory back pain. You will need to ask additional questions to cover this aspect of psoriatic arthritis.

Ask the patient

Do you have early morning stiffness lasting more than 30 minutes?

Look at their joints

- ▶▶ Do they look swollen?
- ▶▶ Do they look red?
- ▶▶ Do they feel warm?

Additional questions to ask

- These are based on the Assessment of Spondyloarthritis international Society (ASAS)¹⁴ criteria for identifying inflammatory back pain and recommended in the Scottish Intercollegiate Guidelines Network (SIGN)¹⁵.
- ▶▶ Have you had neck or back pain for more than 3 months?
 - ▶▶ Does it wake you up in the early hours?
 - ▶▶ Does it get better after exercise or movement?

Follow-up appointments

While the annual assessment is part of the NICE guideline² it is also important

PEST

Score 1 point for each question answered in the affirmative.
A total score of 3 or more is indicative of psoriatic arthritis

- ▶ Have you ever had a swollen joint (or joints)?
- ▶ Has a doctor ever told you that you have arthritis?
- ▶ Do your fingernails or toenails have holes or pits?
- ▶ Have you had pain in your heel?
- ▶ Have you had a finger or toe that was completely swollen and painful for no apparent reason?

In the drawing, please tick the joints that have caused you discomfort (ie stiff, swollen or painful joints).

Figure 3

The Psoriasis Epidemiological Screening Tool PEST (www.bad.org.uk).

to consider making this part of your assessment whenever the patient attends clinic. When assessing the patient's psoriasis, incorporating a brief joint assessment would be an ideal way of checking to see if the patient is showing any signs of inflammatory arthritis. The PEST tool could be employed, as it is validated and easy and quick to use,

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Adverse events should be reported. Reporting forms and information can be found at www.yellowcard.mhra.gov.uk Adverse events should also be reported to Celgene Drug Safety Tel: 0808 238 9908; Fax: 0844 801 0468

References:
1. OTEZLA Summary of Product Characteristics available at www.medicines.org.uk 2. Reich K, et al. Oral presentation FC05.2 given at the 23rd EADV Congress, Amsterdam, October 10, 2014.

Date of Preparation: February 2015

UK-18140057b

so equally useful in primary care and secondary care.

When to refer to rheumatology

All patients with suspected psoriatic arthritis should be referred for assessment by a rheumatologist. The PEST tool will guide you and if the patient scores more than 3 out of 5 then a referral should be made and the score can be used to explain your decision and also show the affected joints. If three or more joints of the hands and feet are affected, it is important to consider rapid referral to an early arthritis clinic. As already discussed, not all patients will present with peripheral joint symptoms and being able to distinguish between mechanical and inflammatory back pain is useful to help decide where to refer the patient.

The key is that if there is a suspicion of inflammatory arthritis the patient should be referred to rheumatology for a further review. The sooner a diagnosis is made, the sooner a patient can commence treatment to manage their symptoms, control inflammation and prevent loss of function. Do not wait for test results before referring a patient to rheumatology as this could cause a further delay.

Conclusion

Determining whether a patient has an inflammatory arthritis can be difficult, as non-inflammatory arthritis, such as osteoarthritis, can have similar symptoms. However, a delay in dealing with inflammatory arthritis can mean that the patient will develop joint damage that is irreversible and can then lead to loss of function.

The most important thing is to recognise that 1 in 5 patients seen in a dermatology clinic could have signs of inflammatory arthritis. Therefore it is essential to ask the relevant questions to try and ascertain whether the patient has any signs and symptoms indicating a potential musculoskeletal problem. If more than three joints in the hands and feet are affected, consider rapid referral to an early arthritis clinic.

Equally, it is important for rheumatologists to understand how to manage psoriasis; for example, it is essential to consider carefully before

giving a patient with psoriasis Depo-Medrone® IM in a rheumatology clinic because of rebound psoriasis flare.

A good relationship between dermatology and rheumatology departments benefits both the patient and staff. Referral pathways can be developed to ensure patients are seen by the appropriate person within a timely manner. A number of dermatology and rheumatology departments are running combined clinics to see patients with psoriatic arthritis together. A combined clinic can be particularly useful for complex patients enabling joint decision-making and improved management of the psoriasis and joint disease. However, good communication between services in the absence of a combined clinic is essential to manage these patients effectively.

Being aware that any patient with psoriasis has the potential to develop psoriatic arthritis is the first step to identifying those who display signs and symptoms. Patients may not disclose that they have painful joints or back pain when they see a dermatology doctor or nurse. Using an assessment tool can help to quickly identify patients who should be referred to rheumatology. Developing a good professional relationship with rheumatology colleagues can facilitate patient referrals and also improve knowledge and skills for both teams. DN



The Psoriasis and Psoriatic Arthritis Alliance (PAPAA)

The PAPAA is a registered UK charity that provides educational support to those affected by psoriasis and PsA, and resources such as information packs, patient information leaflets and learning programmes for healthcare professionals. Visit www.papaa.org

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See SmPC for a full list of side effects.

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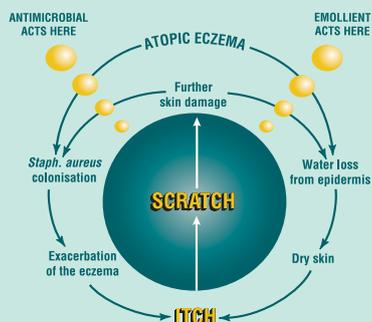
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The role of antimicrobial emollients in general practice

Medical dry itchy skin conditions are very common in general practice and are often chronic conditions that require ongoing medical treatment to manage both the dry skin and the underlying cause of itch. The presence of bacteria on the skin can exacerbate conditions, whilst the need for regular hand washing and decontamination can result in a damaged skin barrier, prone to infection.

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Dermol® Wash Cutaneous Emulsion, Dermol® 200 Shower Emollient and Dermol® 500 Lotion
Benzalkonium chloride 0.1% w/w,
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Dermol® Cream

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chlorhexidine dihydrochloride 0.1% w/w, liquid paraffin 10% w/w,
isopropyl myristate 10% w/w.

Uses: Antimicrobial emollients for the management of dry and pruritic skin conditions, especially eczema and dermatitis, and for use as soap substitutes. **Directions:** Adults, children and the elderly: Apply direct to the dry skin or use as soap substitutes.

Dermol® 600 Bath Emollient

Benzalkonium chloride 0.5% w/w,
liquid paraffin 25% w/w, isopropyl myristate 25% w/w.

Uses: Antimicrobial bath emollient for the management of dry, scaly and/or pruritic skin conditions, especially eczema and dermatitis. **Directions:** Adults, children and the elderly: Add to a bath of warm water. Soak and pat dry.

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DEMPR003/OCT15. Date of preparation: October 2015.

SCARS: AN OVERVIEW OF CURRENT MANAGEMENT AND NURSING CARE

Jacky Edwards

Scarring has major psychological and physical repercussions. Scars are often considered trivial, but they can be disfiguring and aesthetically unpleasant and may cause severe itching, tenderness, pain, sleep disturbance, anxiety, depression and disruption of daily activities. Prevention of hypertrophic scars with early diagnosis of a problem scar and treatment can considerably impact the overall outcome. The management of newly healed wounds to prevent scar formation is one of the most profound things a nurse can do for patients' physical and mental wellbeing. Appropriate management of the scar will ensure that the wound remains healed and that the patient is happy with the outcome. Dermatology nurses should understand the different types of scars, and the principles of scar management, so they can advise patients and be aware of psychosocial implications.

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KEY WORDS

- ▶ Hypertrophic
- ▶ Keloid
- ▶ Silicone
- ▶ Skin camouflage

Pathophysiology and management of hypertrophic scars

Introduction

This article has been written for dermatology nurses who come into contact with patients who develop abnormal scars. The article also focuses on prevention of abnormal scarring and offers some clinical suggestions for how dermatology nurses can manage these scars. The author, a Burns Nurse Consultant, has been managing abnormal scars for 15 years in specific scar clinics.

A scar is an essential part of the natural healing process subsequent to trauma or surgery to the dermis or the epidermis. Any injury that extends into the dermis will always heal with a scar.

Jacky Edwards is a Burns Nurse Consultant/ Honorary Senior Lecturer at the Burn Centre, Wythenshawe Hospital/Manchester Metropolitan University

A scar is the inevitable result of damage to the dermis of the skin. Estimates indicate that each year around 100 million people in the world develop scars¹. Scarring can have unpleasant physical, cosmetic, psychological and social consequences².

The type of scar that forms can depend on a variety of factors, including the nature of the injury, area of the body, and the size and depth of the wound³. Scar classification is important as subtle differences in clinical characteristics can indicate the diagnosis and treatment protocol required³. Scars can be classified in a number of ways, but in a recent updated international clinical review⁴ the most effective is still that recommended by the International Scar Advisory Panel in 2002⁵ (Table 1).

Atrophic scars

Atrophic scars do not feature in the International Scar Advisory Panel definition, but they are flat and depressed below the surrounding skin. They are generally small and often round with an indented or inverted centre, and commonly arise after acne or chickenpox⁶. These are common scars that dermatology nurses may encounter and they often respond to massage.

Table 1.

Scar Classification from International Clinical Recommendations on Scar Management⁵.

Scar Type	Description
Mature	Light-coloured flat, soft scar
Immature	Red, sometimes itchy or painful, raised
Linear hypertrophic	Red, raised and sometimes itchy scar confined to the borders of the original incision. Usually occurs in weeks post-surgery and regresses over time
Widespread hypertrophic	Widespread, red, raised itchy scar which stays within the borders of the original wound and regresses over time
Minor keloid	Focally raised, itchy scar extending over normal tissue, may develop up to one year post injury/ surgery and does not regress
Major keloid	Large, raised (>0.5cm) scar, possibly painful and itchy extending over normal tissue



Figure 1

Normal scars form as a result of the body's natural healing process following injury.

Normal scars (mature and immature)

Normal scars are preceded by injury, immediate in onset, flat and asymptomatic (*Figure 1*). These are the most common type of scar and are a result of the body's natural healing process⁶. Normal scars are formed when a skin defect heals and there is not excessive quantity of newly synthesised collagen. Initially they may be red, dark and raised after the wound has healed, but will become a pale, flat scar naturally over time⁶.

Hypertrophic scars (linear and widespread)

In humans, cutaneous wounds on occasion heal with excessive scarring, far in excess of what is considered to be a 'normal' scar, resulting in a process known as hypertrophic scarring⁷ (*Figures 2 and 3*). These scars occur within weeks of the initial trauma and have a tendency to remain stable or regress with time⁸. It is thought that a hypertrophic scar remains confined to the boundary of the original injury, but may continue to thicken for up to 6 months⁸. Hypertrophic scars are pink, raised, firm, erythematous scars characterised by a decreased expression of collagenase. They occur because of over-zealous collagen synthesis coupled with limited collagen degradation during the remodelling phase of wound healing⁸. The result is the formation

of thick hyalinised collagen bundles consisting of fibroblasts and fibrocytes⁸. Hypertrophic scars usually form within the first month following injury, and usually improve over the next 1-2 years⁸. For this reason wounds that have healed should, if feasible, be checked at about 3-4 weeks post-healing to see if the scar has developed any hypertrophy.

Hypertrophic scars are more common in young people and people with very pale or very dark skin. Some people have an inherited tendency to this type of scarring and should inform their doctor or surgeon if they intend to have surgery⁸. The time to heal of a wound is the most important factor and is closely related to the depth and size of the wound⁸. Despite numerous studies, however, there is no uniformly accepted theory or explanation that indicates which factor initiates hypertrophic scar formation. Several genetic and environmental causes have been implicated in the aetiology of hypertrophic scar formation, but none are proven⁹. However, it is known that an excessive accumulation of collagen from increased collagen synthesis or decreased collagen degradation occurs⁷. Almost all hypertrophic scars are associated with an assault or injury to the skin, in addition factors such as skin tension, wound infection and prolonged



Figure 2

Hypertrophic scarring to the back of the hand.



Figure 3

Hypertrophic scars are pink, raised, firm, erythematous.

inflammatory response have all been implicated⁸.

Keloid scars (minor and major)

Keloids are dermal fibrotic lesions that are a variation of the normal wound healing process (*Figure 4*). Keloids are raised, reddish-purple, nodular scars, which are firmer than hypertrophic scars. Keloids exhibit a prolonged proliferative phase resulting from an inherited metabolic alteration in collagen. The result



Figure 4

Keloid scars are dermal fibrotic lesions that are a variation of the normal wound healing process.

is thick hyalinised collagen bundles, which also contain increased hyaluronidase. Keloids extend beyond the boundaries of the original wound, often with claw-like extensions³. Keloids continue to grow indefinitely and may become uncomfortable and restricting, itchy or painful and not improve in appearance over time³. Formation may occur weeks or years following the initial trauma¹⁰.

Keloids arise due to trauma to the skin, but they also often arise

spontaneously, without history of injury, usually at a presternal site¹⁰. Keloid scars can result from any type of injury to the skin, including scratches, injections, insect bites, ear piercing and tattoos³. Anyone can form a keloid scar and they can occur anywhere on the body, however young people with darker skin are more prone to this type of scarring. Keloids are 5-15 times more common in people with darker skin colour than Caucasian people¹⁰. In a random sampling of black individuals, as many as 16% have

Keloid scar formation has a genetic base, as demonstrated by its predilection for people of certain races and in certain families. People who have developed one keloid scar are likely to be prone to them.

reported developing keloid scars¹¹. Additionally they are more common on certain parts of the body, eg ears, chest, shoulders and back. A person's tendency to develop keloids lessens with age³.

As with hypertrophic scarring, people who have developed one keloid scar are likely to be prone to this condition and should alert their doctor or surgeon to the fact if they need injections or surgery³.

Keloid scar formation has a genetic basis, as demonstrated by its predilection for people of certain races and in certain families³. There are some clinical features which differentiate a keloid and a hypertrophied scar (Table 2).

Hypertrophic scars are more common than keloids and have a good response to treatment, while keloids seldom resolve spontaneously with poor response to treatment³. Keloid scars should be managed by scar specialists, eg plastic surgeons or dermatologists, with access to specific treatments, therefore the treatments discussed in this article will be in relation to hypertrophic scars.

Scar management

Scar management is important; as well as the cosmetic appearance, scars can cause itching, stiffness, scar contractures, tenderness and pain. The psychological effects of scarring include diminished self-esteem, stigmatisation, disruption of daily activities, anxiety and depression². Scars are characterised by the 3 Rs: Redness due to hypervascularity, Raised, because there is 4 times more collagen, and Rigid as the disorganised collagen does not allow for pliability¹². Dermatology nurses should identify a number of aims when managing scars (Table 3).

Table 2.

Differences between hypertrophic and keloid scars.

	Keloid	Hypertrophic
Inheritance	Significant familial predilection	Less familial incidence
Ethnicity	Affect people with skin of colour more than Caucasians	Less likely to be related to skin type
Sex	Females more than males	Equal sex ratio
Age	Most common in 10 to 30 year olds	Any age but more common in younger age groups (under 20 years)
Borders	Overgrows its boundaries	Remains within wound borders
Natural History	Develops months after injury and rarely subsides	Develops soon after injury and subsides with time
Location	High predilection for the face, earlobes, presternal area and deltoid region	Across flexor surfaces
Aetiology	Possible auto-immune phenomenon	Related to tension and timing of wound closure

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Dr Brian Malcolm
GPwSI in Dermatology

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Julie Van Onselen
Independent Dermatology Nurse

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Table 3.

Aims of scar management.

- ▶ To alleviate symptoms
- ▶ To assist in the maturation process
- ▶ To prevent deformities and improve function
- ▶ Prevent growth retardation
- ▶ Reduce disfigurement
- ▶ Assist psychological wellbeing and reintegration into society
- ▶ Be realistic

Management of scars is a challenge, as no treatment is highly effective. It is important for the nurse to give a patient realistic expectations and to inform them that no scar can ever be removed completely — all scars are permanent, though they may improve naturally over a period of time.

Assessment

In order to assess whether a scar is responding to treatment regular assessment should be carried out. There is a large range of tools available but all assess the same basic parameters, such as pigmentation, thickness, height, vascularity, pliability and patient acceptability¹³. Many of the tools lack validity; the Patient and Observer Scar Scale (POSAS), however, has been seen to be more consistent and reliable when compared to the Vancouver Scar Scale (VSS), which is the most widely used tool¹³. In addition, the POSAS tool has a patient assessment, which is significant when measuring scar reduction.

Prevention

Hypertrophic scars generally begin to appear between the third and fifth week after the wound heals. Therefore nurses need to understand the mechanism of scarring as assessment of the newly healed wound needs to take place within that timeframe. It is obviously much more effective to prevent hypertrophic scars than to treat them. As delayed epithelialisation (beyond 10 to 14 days) increases the risk of hypertrophic scarring dramatically, achievement of rapid wound closure within 3 weeks is mandatory to avoid abnormal scar

formation². This is important, as often in clinical practice patients are referred for specialist scar management with firmly established scars that are much more difficult to manage. Prevention implies using a therapy with the aim of reducing the risk of a problem scar evolving; also early diagnosis of a problem scar can considerably affect the outcome.

Moisturising

Clinical studies have identified that, after wound healing, water evaporates more rapidly through scar tissue and this may take over a year to recover to pre-wound levels¹⁴. So additional moisture in the form of an emollient or moisturiser should be applied to the skin at least twice a day, which helps to prevent dry and itchy skin.

Management of scars is a challenge, as no treatment is highly effective. It is important for the nurse to give a patient realistic expectations and to inform them that no scar can ever be removed completely.

Massage

Massage is an important first-line method of preventing abnormal scar formation. The mechanism of action has not been investigated, but it is thought that massage helps to break up collagen fibres, which helps the scar soften, flatten and fade¹⁵. Massage should be commenced as soon as the wound heals. Emollients or bland massage oils can be used, and patients may need to try several to find the one that suits them. They do not need to be medical grade as the massage is the important issue¹⁵. Massage must be systematic along the line of the scar or over the scarred area and the massage must blanch the scar and be performed in small circular movements¹⁵. It is thought that too much emollient or moisturiser should not be applied, as this can occlude sebaceous glands; also over-vigorous massage can lead to blister formation on new scars.

Sun protection

UV radiation has a negative effect on new scars leading to hyperpigmentation². Sun protection with an SPF 50 and 4/5 star UVA rating should be used as a primary prevention when skin is exposed to direct light². It is advisable to recommend to patients to try and limit exposure to direct light, with no specific sun bathing, and to re-apply sun protection often. In addition, light can penetrate light clothing so there is a need to advise patients to use sun protection under their clothing. Not all patients can afford expensive sun protection so they can be advised to use a children's version as this rubs in more easily.

Treatments

Silicone gel

While massage should be commenced as soon as healing occurs, the use of silicone gel sheets is only recommended if abnormal scars start to form. If the scar has started to feel firm, is warmer than the surrounding skin, painful, itchy, redder or even slightly raised, then silicone gel therapy should be considered. Silicone gel therapy has been used widely since the early 1980s and is a safe and effective management option; the gels adhere and mould to any body contour and are safely and painlessly applied and removed¹⁶. The exact mechanism of the action of gel sheeting remains unknown despite several studies; pressure, temperature and oxygen tension have all been investigated without success. The softening and flattening effect of gel sheeting may be due to hydration of the stratum corneum and/or release of a low molecular weight silicone fluid².

Application of silicone gel improves the redness, itching, texture and thickness of hypertrophic and keloid scars in 60–100% of cases¹⁶. Results from randomised, controlled trials suggest that silicone gel sheeting is a safe and effective management option for both hypertrophic and keloid scars⁴.

These gels should be worn for 24 hours a day, but they can be removed for bathing and can be washed in warm water and reapplied. Patients are advised

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to build up wear time until they can tolerate 8 hours or more, and ensure good hygiene of the product, which helps to prevent skin reactions. The gels are self-adhesive or can be held in place by bandages, tape, silicone adhesive or pressure garments.

Silicone products vary considerably in composition, durability and adhesion; this makes them more area-specific. There are many gel sheets and a number of these are available on FP10 (eg, Mepiform[®], Cica-Care[®], Silgel[®]). Generally they are comfortable, durable, and easy to apply and remove, non-antigenic and non-toxic. Choice of product often depends on the anatomical area and if any additional pressure was required. For example, Mepiform[®] is a thin gel sheet and is often used on hands, faces and limbs, whereas Silgel[®] or Cica-Care[®] are thicker gel sheets and are useful for flexures but may require splints or taping to keep them in place¹². Some patients cannot tolerate silicone in a gel sheeting and therefore they can utilise the gel formations now available (eg, Silderm[®], Kelocote[®], Dermatix[®]). These are often preferred for high-mobility or large areas, use on the face or in hot, humid climates. There is very little practical difference between the gel formations; although some products do claim quicker drying times there have been no published comparative studies to support this.

For patients with allergy to silicone, there are other products available containing glycerine or wheatgerm (eg Novagel[®] or Geligne[®]) but these products are not available on FP10.

Pressure garments

Pressure garments were first developed in 1971¹⁷. In 2016, pressure garments have 4 main functions. These are: restoration of function, relief of symptoms, prevention of scar recurrence and promotion of optimal aesthetic appearance¹². It is suggested that pressure results in the reduction of the cohesiveness of the intercollagen fibres, increased vesicular fibroblasts and decreased mast cells⁸. However, as with many other mechanisms of scar management, there is little scientific

evidence as to its mechanism of action or amount of pressure required. It is suggested that pressures should be 24mmHg or above and must be maintained for a minimum of 12 months⁸. Although mechanism of action is not validated, over 24mmhg is a level that exceeds the inherent capillary pressure and therefore ensures occlusion, this in turn should promote hypoxia and therefore collagen degradation⁸.

Pressure garments are most useful when the scar is still immature, either as prophylaxis in individuals who are at risk of developing abnormal scars or when there are early signs of abnormal scarring⁸. They can be used on any type of scar regardless of size. They are 85% successful in compliant patients, but the garments are tight, and must be worn for 23 hours a day for up to 2 years, so compliance is often an issue⁸. Failure occurs where pressure is not practically maintained and close supervision is necessary to ensure fit, comfort and proper skin care⁴.

Garments are tailor-made for each patient, who are usually provided with 2-3 pairs and must wash the pressure garments daily in warm soapy water and dry by rolling in a towel and leaving flat, as the Lycra in the garments can be damaged by heat. Garments are generally made in-house or bought commercially.

Pressure garments can be used in conjunction with silicone gels and this has added efficacy in areas that are difficult to apply pressure, such as the sternal area, over joints or other difficult anatomical areas⁴.

Corticosteroid injections

Intra-lesional corticosteroid injections of triamcinolone are thought to be effective, partly because steroids restrict the blood flow locally in the scar and inhibit protein synthesis⁸.

The inhibition of protein synthesis allows the collagen breakdown to continue, but without collagen replacement. This appears to be very good for small scars, but it has drawbacks in large scars. Steroids seem

to be more effective in preventing hypertrophic scars than resolving them, and are frequently administered in combination with surgery and pressure therapy to prevent recurrences³.

Steroid injections are painful and topical local anaesthetic can be used, although this is also painful to administer and many patients choose not to have it. Multiple small injections are given every 4-6 weeks, until the scar is flattened, usually between 6 and 10 months. Care must be taken not to infiltrate surrounding skin as this can lead to skin hypertrophy, depigmentation and telangiectasia, also if over-infiltrated there is a risk of skin ulceration⁸.

Some services use a steroid-impregnated tape or topical steroids under occlusion for management of scars. However, topical steroid creams and impregnated steroid tape have been used with varying success, and are options for symptom relief and for large areas, as absorption through an intact epithelium into the deep dermis is limited⁴. In fact there is greater evidence for the use of hypoallergenic microporous tape with elastic properties to minimise the risk from shearing than for the use of topical steroids, as it is thought to reduce hypertrophic scarring by mimicking the corneum and accelerating healing¹⁸.

Surgical revision

Surgery may be necessary to release a tight scar near a joint that is restricting movement, or to improve the cosmetic appearance. Patients should have a realistic perspective of the lengthy healing time following revision procedures and the likely outcomes given the injury characteristics. The timing of revision surgery is influenced primarily by the well characterised biochemical and histologic events following injury². Scars mature or remodel over 12-24 months, resulting in a final scar that has a tensile strength of 70-80% of uninjured skin. Hence the final visible outcome of a scar can be best assessed after this period². For this reason surgery may be best left until after this time unless the scarring is causing functional problems². Additionally

the patient should be psychologically ready for the surgery and be able to have realistic outcomes.

Any surgical removal will always leave a new scar, which will take a further 2 years to mature and may also develop abnormal scarring if the patient is predisposed. Surgery will never remove a scar but it can alter its position, alignment or shape. Sometimes surgery will actually make the scar longer, although its appearance may be improved. This is particularly important to bear in mind when the scar is in a visible location.

Laser

There is increasing consensus that laser therapy has a role in the management of hypertrophic scars and keloids. Lasers are used to treat residual redness, telangiectasias or hyperpigmentation². However, the variety of lasers and the lack of RCT evidence suggest that their role is still not well defined. Pulse-dye laser (PDL) seems to have the best evidence, especially if used in conjunction with pressure therapy and intralesional steroids². However there is also good evidence for the use of fractional laser, which requires fewer sessions⁴. Nurses need to be aware that use of laser therapy will often have side-effects such as transient erythema, oedema and purpura so they can inform patients of these.

Skin camouflage

Sometimes, even when the scar has settled and paled, there is still an obvious scar which the patient finds difficult to live with. Skin camouflage can often achieve excellent results when other medical interventions have failed. Camouflage practitioners are trained to assess and colour-match the patients so the more appropriate products are selected for the individual patient to provide a natural-looking coverage. The patient is also taught how to apply skin camouflage¹². This is important as it enables patients, particularly with facial scarring, to face the outside world. Skin camouflage is provided by either the charity Changing Faces or The British Association of Skin Camouflage (BASC). An NHS service

may be provided in dermatology and plastic surgery departments by these camouflage practitioners. These services can also be accessed privately by self-referral via Changing Faces: www.changingfaces.org.uk, over the counter through Clinique™, or by contacting a BASC practitioner: www.skin-camouflage.net.

Patient education

Whatever management plans are put forward, the key to success is patient or carer concordance as the patient or carer will be responsible for carrying out many scar management procedures. Patients and carers need to understand the benefits of what are often uncomfortable or unsightly treatments in order to make an informed decision about undertaking the treatments. It is essential they understand that concordance with treatment will decrease the potential for, or limit the severity of, any abnormal scarring or pigmentation changes.

Conclusion

Unfortunately wounds often develop into scars and the effects of scars are wide-ranging, not only physically but psychologically as well. Simple preventative techniques can easily be taught to all patients and carers and simple treatments like silicone gels are readily available on prescription. Ideally management of a scar should not end when the wound is healed but all patients should be assessed at 3-4 weeks for possible abnormal scar formation². However this is not always feasible, so patients should be given good after-care advice and be signposted back to services if abnormal scarring develops. **DN**

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Date of preparation: January 2016 Code: Pro-B/UK/0030c

ADVERSE EVENT REPORTING

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to ProStrakan Ltd. on 01896 664000.

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UPDATE ON IMMUNISATIONS INCLUDING ADVICE FOR PATIENTS ON IMMUNOSUPPRESSANTS

Tracey Thompson

In the past 50 years immunisation through vaccinations has saved more lives worldwide than any other medical product or procedure¹. The NHS has an established immunisation programme, which is constantly updated with the latest evidence and recommendations in a resource called 'The Green Book'². Dermatology nurses need to be aware of immunisation advice that is specific to patients with skin conditions. This includes the British Association of Dermatologists' immunisation recommendations for patients on immunosuppressant medication³. Dermatology patient groups also advise people with skin conditions on immunisations, for example The National Eczema society has produced a factsheet on immunisation and eczema⁴.

Citation: Thompson T. Update on Immunisations including advice for patients on immunosuppressants. *Dermatological Nursing* 2016, 15(2):27-34

KEY WORDS

- ▶ Immunisation
- ▶ Immunosuppressant medicines
- ▶ NHS Vaccination Programme 2016
- ▶ Travel vaccinations

Immunity, immunisation and vaccines

Immunity is the body's defence mechanism against bacteria, viruses and other foreign substances⁵. The defence mechanisms are complex and include innate (non-specific) and acquired (passive and active). Innate mechanisms can include physical (eg, skin) and chemical (eg, gastric juices) which are non-specific².

Acquired immunity is actively produced by the body's own immune system in response to natural disease or immunisations². The immune system responds to bacteria and virus molecules known as antigens (a foreign substance in the body) by producing antibodies (a type

of protein) and special white blood cells called lymphocytes that mark the antigens for destruction. During the primary immune response, which is the first encounter with a specific antigen, some lymphocytes called memory cells develop the ability to retain long-lasting immunity. These memory cells recognise antigens on the pathogens they have encountered before triggering the immune system to respond faster and more effectively than on the first encounter⁵.

"Immunisation is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine"⁵. A vaccine presents a foreign antigen, which stimulates the body's own immune system to protect the person against subsequent infection or disease, but without risk from the disease or its complications².

Types of vaccine in clinical use

1. Inactivated/killed vaccines (eg polio (IPV)) consist of inactivated viruses or killed bacteria⁶. Although the virus or bacteria particles are destroyed and cannot reproduce, the virus proteins or bacterial wall are intact enough to

be recognised and remembered by the immune system to stimulate a response. As the vaccine does not reproduce, booster shots (a primary course) may be required to reinforce the immune response².

2. Live attenuated vaccines (eg MMR, tuberculosis (BCG), rotavirus and yellow fever) consist of live virus that is weakened — 'attenuated'. The weakened, live virus must reproduce in the vaccinated individual over a period of time (days or weeks)². Since they do reproduce and continue to present antigen to the immune system beyond the initial vaccination, attenuated vaccines cannot be used by immunocompromised individuals as they may not be able to limit the limited viral replication⁶.

3. Subunit vaccines, like inactivated (whole-cell) vaccines, do not contain live components of the pathogen and are considered very safe⁵. They differ from inactivated vaccines in that they contain only the antigenic properties of the various potential parts of the pathogen to elicit a protective immune response⁵. These include microbial fragments, genetically engineered proteins, purified toxins treated to detoxify them (toxoids) and purified sugars (polysaccharides). They are unable to cause disease⁶.

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History of vaccinations: 'The miracle of modern medicine'

Earliest reference	10th-17th centuries	18th century	20th century	Recent years
In 429 BC, the Greek historian Thucydides noted that survivors of the smallpox plague in Athens did not become re-infected with the disease.	Buddhist monks drank snake venom to obtain immunity from snake bite ⁷ . The Chinese used a primitive form of variolation to prevent smallpox. Tissue from scabs caused by the disease was inserted under the skin of healthy people, or the powdered scabs from smallpox pustules were inserted up the nose ⁷ .	By the early 18th century, when smallpox was the most infectious disease in Europe, killing up to 20% of those infected, variolation was being practiced in England. It caused mild illness and occasionally death, but smallpox rates were reduced in the populations that tried it ⁷ . In 1796, British physician Dr Edward Jenner proved that vaccination worked by using matter from cowpox pustules to inoculate patients successfully against smallpox ⁵ . He was awarded government funding to continue. Vaccination became popular throughout Europe and beyond ¹ .	By 1904, Louis Pasteur's experiments spearheaded the development of live attenuated cholera vaccine and inactivated anthrax vaccine in humans ⁷ . Plague, typhoid and rabies vaccines were also invented ⁵ . In 1923, Alexander Glenny perfected a method to inactivate tetanus toxin with formaldehyde. The same method was used to develop a vaccine against diphtheria in 1926 ⁷ . By the 1950s vaccines for tetanus, whooping cough, tuberculosis (BCG), polio, measles, mumps, rubella, meningitis A and yellow fever had commenced ⁷ and national vaccination programmes dramatically reduced the number of deaths from disease. In 1979, the World Health Organization's aim to eradicate smallpox was achieved ⁵ . Viral tissue culture methods developed from 1950-1985 led to vaccines for polio, measles, mumps, hepatitis A, hepatitis B, chickenpox, meningitis A, rubella, pneumonia, Haemophilus influenzae ⁸ and viral influenza ⁵ . Polio has almost been eradicated and measles is currently the next possible target for elimination via vaccination ⁷ . Opposition occurred throughout from people who found it hard to believe that vaccination worked and/or thought that compulsory vaccination takes away people's civil liberties ⁷ . By the late 1970s and 1980s this manifested in increasing litigation and decreased profitability, resulting in a decline in the number of companies producing vaccines ⁷ . By 1999, rotavirus, Men C and shingles vaccines had been produced.	In 2008, Professor Hausen discovered that cervical cancer was caused by certain strains of the human papillomavirus (HPV). This led to the development of the HPV vaccine, which is offered to all girls aged 12-13 in the UK to prevent against cervical cancer. By 2013 the NHS had included shingles, rotavirus and children's flu (via nasal spray) in its vaccination programme, with the most recent addition being the Men B vaccination for babies in 2015 ¹ .

According to the IAC⁷ the future application of molecular genetics and increased insights into immunology, microbiology and genomics may mean the development of more effective vaccines against cytomegalovirus (CMV), herpes simplex virus (HSV), staphylococcal disease, streptococcal disease, pandemic influenza, shigella, HIV, and malaria among others. Therapeutic vaccines may also soon be available for cancer, allergies, autoimmune diseases and addictions⁷.

Table 1.

NHS IMMUNISATION SCHEDULE in 2015. Adapted from NHS Choices⁹.

AGE	VACCINE RECOMMENDED	NOTES
8 weeks	5-in-1 (DTaP/IPV/Hib) vaccine	A single injection containing 5 vaccines to protect against five separate diseases: diphtheria, tetanus, whooping cough (pertussis), polio and Haemophilus influenzae type b (known as Hib)
	Pneumococcal (PCV) vaccine	3 separate injections 'pneumococcal conjugate vaccine'
	Rotavirus vaccine LIVEVACCINE	Oral vaccine Rotarix [®] 2 doses
	Men B vaccine	Meningitis B (called Bexsero [®])

Continued overleaf



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Essential Information: Diprobase Lotion

 MSD Consumer Care, Inc. 3030 Jackson Avenue, Memphis, TN 38112, USA.
 N.V. Organon, Molenstraat 110, 5342 CC, Oss, The Netherlands.

Active Ingredients: None. **Legal Category:** Medical device. **Uses:** Diprobase Lotion is an emollient with moisturising and protective properties, recommended for the management of eczema and other dry skin conditions. Relieves and soothes dry or eczematous skin. **Side-effects:** No skin reactions have been reported with product use. **Contra-indications:** Hypersensitivity to any of the ingredients. **Dosage:** Apply to affected area as often as required. **Package Quantities:** 300ml pump pack, 50ml tubes. **NHS Price:** 300ml £3.49, 50ml £1.28. **Recommended Retail Price:** 300ml £7.99, 50ml £3.99. **Date of preparation:** December 2014. For further information contact Bayer plc, Consumer Care Division, Bayer House, Strawberry Hill, Newbury, Berkshire, RG14 1JA, U.K.

Please refer to the full SPC text before prescribing this product. Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Bayer plc, Consumer Care Division.

Date of preparation: September 2015
 Code: AWB-1908557141
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Table 1.

Continued

12 weeks	5-in-1 (DTaP/IPV/Hib)vaccine (second dose)	
	Men C vaccine	Men C (meningococcal group C bacteria) fully protected against Men C = 2 separate doses of the Men C vaccine as a baby plus a booster dose as a teenager
	Rotavirus vaccine (second dose) LIVEVACCINE	
16 weeks	5-in-1 (DTaP/IPV/Hib) vaccine (third dose)	
	Pneumococcal (PCV) vaccine, (second dose)	
	Men B vaccine (second dose)	
12-13 months	Hib/Men C booster	A single injection containing Men C (second dose) and Hib (fourth dose)
	Measles, mumps and rubella (MMR) vaccine, LIVE VACCINE	MMR contraindicated for patients having current immunosuppressive therapy (including high doses of corticosteroids) as measles inclusion-body encephalitis, pneumonitis, and fatal outcome as a direct consequence of disseminated measles vaccine virus infection have been reported M-M-RVAXPRO is not contraindicated in individuals who are receiving topical or low-dose parenteral corticosteroids (eg for asthma prophylaxis or replacement therapy) ¹¹ Two separate doses of the MMR vaccine are required. Usually first dose between 12 and 13 months and second before starting school ¹⁰ Pork gelatine is an ingredient in M-M-RVAXPRO, advise patient to speak with practice before injection as there is an alternative MMR vaccine available not containing pork gelatine
	Pneumococcal (PCV) vaccine (third dose)	
	Men B vaccine (third dose)	
2, 3 and 4 years plus school years one and two	Children's flu vaccine (annual) LIVEVACCINE	Nasal spray Fluenz Tetra® and FluMist® Quadrivalent Not suitable for children who have a severely weakened immune system, severe egg allergy, severe asthma or active wheezing at the time of vaccination. Children unable to have the nasal spray vaccine may be able to have the flu injection instead
From 3 years and 4 months (pre-school)	4-in-1 (DTaP/IPV) (pre-school booster)	Given as a single jab containing vaccines against diphtheria, tetanus, whooping cough (pertussis) and polio
	Measles, mumps and rubella (MMR) LIVEVACCINE	Check first dose has been given
All girls between 12-13 years	HPV vaccine (Gardasil®)	Protects against cervical cancer — two injections (if under 15 years old) or three injections (if over 15 years old) given between 6 months and 2 years apart. The vaccine protects against the two types of HPV (16 & 18) that cause 75% of cervical cancer, as well as two other types of HPV that cause about 90% of cases of genital warts ¹⁰
13-18 years	3-in-1 (Td/IPV) teenage booster)	Given as a single jab and contains vaccines against diphtheria, tetanus and polio
	Men ACWY vaccine	1 injection either Nimenrix® or Menveo®
19-25 years (first-time students only)	Men ACWY vaccine	1 injection either Nimenrix® or Menveo®
65 and over	Flu (every year)	Seasonal influenza (flu) injection for people with immunosuppression, pregnancy, long-term health conditions. As flu viruses continually change, last year's vaccine might not protect against any new strains ¹⁰

Table 1.

Continued

70 years (and 78 and 79 year-olds as a catch-up)	Pneumococcal (PPV) vaccine	For certain groups of people who are at greater risk of infection from pneumonia and meningitis as a result of health problems that may include ongoing lung, heart, kidney or liver problems, and people with lowered immunity, diabetes or cochlear implants ¹⁰
	Shingles vaccine LIVEVACCINE	1 injection Zostavax® offered to people aged 70 or 78 in 2015/6
Vaccines for special groups	Hepatitis B vaccination	Not routinely available to everyone on the NHS, but available for people who fall into certain risk groups, such as individuals with long-term health conditions, pregnant women and healthcare workers ¹⁰
	TB vaccination LIVEVACCINE	1 injection BCG
	Chickenpox vaccination LIVEVACCINE	2 separate injections VARIVAX® 4-8 weeks apart
	Flu jab annually	Birth to 35 years of age or for people with immunosuppression, pregnancy or long-term health conditions or risk groups such as healthcare workers
	Pneumococcal (as above)	
Travel vaccines	Hepatitis A vaccine	Some travel vaccines should be available for free on the NHS from your local surgery
	Typhoid vaccine ORAL LIVEVACCINE	At least 1 month pre-travel, Vi injection or Ty21a = 3 capsules taken on alternative days, gives immunity for 3 years
	Cholera vaccine ORAL	2 doses for adults 1-6 weeks apart and 3 doses for children, ideally completed one week before travel. Not recommended for children under 2 years old
	Yellow fever vaccination only available privately LIVEVACCINE	Exemption from yellow fever vaccination = people who are immunosuppressed and/or allergic to eggs

Travel vaccinations

If travelling to countries in Northern and Central Europe, North America or Australia/New Zealand the patient is unlikely to need any extra immunisations⁹. However, for the rest of the world the UK childhood immunisation programme doesn't cover most of the infectious diseases⁹. This is where the dilemma lies for the patient who is on, or about to commence, an immunosuppressant and requires an attenuated/live vaccine.

Patients should be advised to contact their GP practice at least 12 weeks before the date of travel to find out whether their existing UK immunisation status is up-to-date and to seek advice about travel vaccinations and health, such

as protection from malaria⁹. Some vaccinations need to be given well in advance to develop immunity. Some also involve multiple doses spread over several weeks⁹. GP practices may be able to provide all the travel vaccinations, however some will be charged as not all vaccinations are covered under the NHS. There are private vaccination clinics for UK boosters and other travel jabs⁹. Vaccination against certain diseases may not be advised for immunosuppressed people⁹.

Close people

Healthy people in close contact with the immunosuppressed, who undergo vaccination with certain live attenuated vaccine strains, can transmit infection to those who are immunosuppressed. Oral polio and

live attenuated (nasal) influenza, for example, should be deferred. Other live vaccines, however, such as measles, mumps, rubella, yellow fever, oral salmonella, varicella (Varivax®), and zoster (Zostavax®) vaccines are less likely to be transmitted and may be given to those in close contact with the immunosuppressed¹².

International Certificate of Vaccination or Prophylaxis (ICVP)

Some countries (not the UK) require an International Certificate of Vaccination or Prophylaxis (ICVP) before entering. One example, Saudi Arabia, requires proof of vaccination against certain types of meningitis for visitors arriving for the Hajj and Umrah pilgrimages. Under the regulation of WHO, an ICVP is required for anyone travelling to a country or area

Table 2.
Considerations when planning travel vaccinations^{9,17}

Country or countries travelling to	Some diseases are more prevalent in certain parts of the world
When travelling	Some diseases are more prevalent at certain times of the year; for example the rainy season
Length of stay	The longer the travel, the greater the risk
Age and health	More risk for travel for children who may not have completed their course of UK scheduled vaccines; immunosuppressed patients, or pregnant women who cannot have live vaccinations
Where staying	More risk in rural areas than urban, backpacking/camping more risky than hotels/package holidays
Purpose of travel	More risk if the person is working in rural areas, refugee camps or natural disaster affected areas
Potential contact with animals	More risk of contacting diseases that are spread by animals, for example rabies

where there is a risk of picking up or spreading the virus that causes yellow fever⁹. It would be up to the patient who is immune-compromised to check with those countries' immigration authorities whether an exemption letter is enough¹³.

Yellow fever

Yellow fever vaccinations can only be given at designated centres¹⁴. For a centre to become a designated yellow fever vaccination centre, it must register with the appropriate authority. In the UK, this is either the National Travel Health Network and Centre (NaTHNaC) or Health Protection Scotland (HPS).

The vaccination is not usually available for free on the NHS. On average, a single vaccination costs around £60. If the certificate is lost, another one can be reissued as long as the patient has the details of the vaccination: batch number and the date given¹³.

Patients who are severely allergic to any of the ingredients in the vaccine — including eggs — may be issued with an exemption letter, which may be accepted by immigration

authorities¹⁴. The patient will need to take measures to prevent mosquito bites while travelling.

Other travel illnesses

The immunosuppressed patient also needs to be aware and take prophylactic and preventative measures for other illnesses that cannot be prevented by vaccination. These include travellers' diarrhoea, malaria and other arthropod-borne illnesses, respiratory infection and sun exposure¹².

Immigrants

The Health Protection Agency (part of Public Health England) has produced a 'Migrant Health Guide'¹³, which includes advising practitioners to always ask new migrants about their vaccine history and assume they are not vaccinated unless they can give a reliable history of vaccination. Individuals partway through their immunisation schedule should be transferred to the UK schedule appropriate for their age¹³.

Immunisations and patients with skin conditions

Patients with skin conditions will often ask dermatology healthcare

professionals about immunisations and may have concerns that require reassurance to enable the parent or person to make an informed choice about immunisation. These can include parental concern following the adverse publicity for the MMR vaccine generated by the now-discredited 1998 Wakefield paper¹⁵, new ethnic minorities within a Trust's group, low socioeconomic/deprived areas¹⁶, as well as avoidance due to known allergy to substances such as egg, antibiotics or latex contained in some immunisations^{2,4}.

Special considerations for patients on immunosuppressant therapy

A patient assessment for commencing immunosuppressant therapy should include questions and advice on immunisations. These questions should include: Have they had their full childhood immunisations? Has the patient had all their immunisations for work and potential travel arrangements? The patient needs be aware of the risk of severe or fatal infection if a live vaccine is given and/or the patient is exposed to a disease that they have not been immunised for if they are on an immunosuppressant².

Patients should not receive live vaccines if they are receiving systemic high-dose steroids until at least 3 months after treatment has stopped. This includes children who receive prednisolone of 2mg/kg/day for at least one week, or 1mg/kg/day for more than one month. An adult equivalent dose is at least 40mg of prednisolone per day for more than one week². If patients are on lower doses of steroids they may be immunosuppressed and have an increased risk of infection, so vaccines should be considered with caution, ie in discussion with a specialist physician. Patients receiving other types of immunosuppressants alone or in combination with lower doses of steroids need to wait at least 6 months after stopping an immunosuppressant. The advice of the physician in charge or an immunologist should be sought².

Recommendations for immunosuppressed patients

The BAD recommends advising patients and/or their carers to avoid live attenuated vaccines if already on immunosuppressant medication³. This means that children and adults may need to have their immunisations delayed if taking immunosuppressant drugs such as azathioprine, ciclosporin or methotrexate, or oral steroids (eg prednisolone). In such cases, medical advice should always be sought from a healthcare professional regarding risk and benefit.

- ▶▶ If live vaccines are needed they should be given at least 4 weeks before commencing an immunosuppressant treatment³.
- ▶▶ Live vaccination should not be given within 3 months (prednisolone) or 6 months (other treatments) of stopping immunosuppression³.
- ▶▶ Inactivated vaccines should ideally be given at least 2 weeks before treatment, but can be given during immune suppressing treatment³.

Steroid creams or joint injections do not suppress the immune system. Therefore it is safe to have live or inactivated vaccinations if applying steroids to skin, or having steroid injections into joints³.

- ▶▶ Non-systemic corticosteroids, such as aerosols or topical or intra-articular preparations, do not cause systemic immunosuppression. Therefore administration of live vaccines is not contraindicated.
- ▶▶ The patient needs to be aware of the risk of severe or fatal infection if a LIVE vaccine is given and/or the patient is exposed to a disease that they have not been immunised for and/or if they are on an immunosuppressant².

Useful resources

- ▶▶ Immunisation Recommendations for Children and Adult Patients Treated with Immune-Suppressing Medicines. BAD Patient

Table 3.

Immunosuppressants and Summary of Product Characteristics (SPC)/BAD advice.

Ciclosporin	Vaccination may be less effective and the use of live attenuated vaccines should be avoided. www.medicines.org.uk/emc/medicine/1307
Methotrexate	May reduce immunological response to concurrent vaccination. Severe antigenic reactions may occur if a live vaccine is given concurrently. www.medicines.org.uk/emc/medicine/6003#INCOMPATIBILITIES
Prednisolone	Avoid exposure to measles, and seek immediate medical advice if exposure occurs. Prophylaxis with IM normal immunoglobulin may be needed. Live vaccines should not be given to individuals on high doses of corticosteroids, and should be postponed until at least 3 months after stopping corticosteroid therapy. Chickenpox may be fatal in immunosuppressed patients. Patients without a definite history of chickenpox should be advised to avoid close personal contact with chickenpox or herpes zoster and if exposed they should seek urgent medical attention. (For varicella-zoster immunoglobulin (VZIG).) www.medicines.org.uk/emc/medicine/27027
Mycophenolate mofetil	Live vaccines should not be given to patients. The antibody response to other vaccines may be diminished. www.medicines.org.uk/emc/medicine/1679
Azathioprine	Administration of live vaccines to patients receiving azathioprine therapy is not recommended. A diminished response to killed vaccines is likely and such a response to hepatitis B vaccine has been observed among patients treated with a combination of azathioprine and corticosteroids. A small clinical study has indicated that standard therapeutic doses of azathioprine do not deleteriously affect the response to polyvalent pneumococcal vaccine. www.medicines.org.uk/emc/medicine/26877
Hydroxycarbamide	Concomitant use of hydroxycarbamide with a live virus vaccine may potentiate the replication of the vaccine virus and/or may increase the adverse reaction of the vaccine virus, because normal defence mechanisms may be suppressed by hydroxycarbamide therapy. Vaccination with a live vaccine in a patient taking hydroxycarbamide may result in severe infections. Generally, the patient's antibody response to vaccines may be decreased. Treatment with Siklos® and concomitant immunisation with live virus vaccines should only be performed if benefits clearly outweigh potential risks. www.medicines.org.uk/emc/medicine/19081
Etanercept	Live vaccines should not be given concurrently with Enbrel®. No data are available on the secondary transmission of infection by live vaccines in patients receiving Enbrel®. In one study, most psoriatic arthritis patients receiving Enbrel® were able to mount effective B-cell immune response to pneumococcal polysaccharide vaccine. www.medicines.org.uk/emc/medicine/24761
Infliximab,	It is recommended that paediatric patients, if possible, be brought up to date with all vaccinations in agreement with current vaccination guidelines prior to initiating infliximab therapy. www.medicines.org.uk/emc/medicine/29980
Rituximab	Vaccination with live virus vaccines is not recommended. Patients treated with MabThera® may receive non-live vaccinations. However, with non-live vaccines response rates may be reduced. Untreated controls had a lower rate of response to vaccination with tetanus recall antigen (16% vs 81%) Mean pre-therapeutic antibody titres against a panel of antigens (Streptococcus pneumoniae, influenza A, mumps, rubella, varicella) were maintained for at least 6 months after treatment with MabThera®. www.medicines.org.uk/emc/medicine/2570

Table 3.

Continued

<p>Ustekinumab</p>	<p>It is recommended that live viral or live bacterial vaccines should not be given concurrently with Stelara®. Before live viral or live bacterial vaccination, treatment with Stelara® should be withheld for at least 15 weeks (6 months according to the BAD) after the last dose and can be resumed at least 2 weeks after vaccination. Patients receiving Stelara® may receive concurrent inactivated or non-live vaccinations. Long-term treatment with Stelara® does not suppress immune response to pneumococcal polysaccharide or tetanus vaccines. www.medicines.org.uk/emc/medicine/21425</p>
<p>Secukinumab</p>	<p>Live vaccines should not be given concurrently with Cosentyx®. Patients receiving Cosentyx® may receive concurrent inactivated or non-live vaccinations. Data suggests that Cosentyx® does not suppress the humoral immune response to the meningococcal or influenza vaccines. www.medicines.org.uk/emc/medicine/29848</p>
<p>Topical tacrolimus (ointment) and pimecrolimus, according to the National Eczema Society⁴</p>	<p>In two studies, the primary response to vaccination was not affected. There was no evidence of systemic accumulation of tacrolimus (Protopic®) in patients (adults and children) treated for prolonged periods (up to one year) with tacrolimus ointment. www.medicines.org.uk/emc/medicine/8816 But due to a potential risk of vaccination failure, the manufacturer advises that vaccination should be administered either prior to commencement of treatment with tacrolimus or after a tacrolimus-free interval of 2 weeks. It also appears to be wise to avoid treatment with topical tacrolimus for 3 weeks after vaccination. In the case of live vaccines, treatment with topical tacrolimus is best avoided for 28 days before and after vaccination, to avoid the additional theoretical possibility of an infection. This should also be followed for pimecrolimus as a precaution, according to the National Eczema Society⁴.</p>

Information Leaflet. Available at: www.bad.org.uk/shared/get-file.ashx?id=210&itemtype=document

- ▶ NHS Fit for Travel website: www.fitfortravel.nhs.uk
- ▶ 'The Green Book'. Available at: www.gov.uk/government/collections/immunisation-against-infectious-disease-the-green-book
- ▶ NaTHNaC.net and www.travax.nhs.uk both offer useful travel information for healthcare professionals
- ▶ British Medical Association (BMA) — Focus on Travel Immunisation. Available at: www.bma.org.uk/support-at-work/gp-practices/focus-travel-immunisation
- ▶ Also:
 - ▶ BMA Focus on vaccines and immunisations — Guidance for GPs. www.bma.org.uk/support-at-work/gp-practices/focus-vaccinations
 - ▶ BMA Focus on hepatitis B immunisations — Guidance for GPs. www.bma.org.uk/support-at-work/gp-practices/focus-hepatitis-b-immunisations

- ▶ BMA Focus on travel immunisation — Guidance for GPs. www.bma.org.uk/support-at-work/gp-practices/focus-travel-immunisation
- ▶ Immunisation and Eczema. National Eczema Society factsheet. www.eczema.org/search
- ▶ Travel Health Nursing: Career and Competence Development. Royal College of Nursing. Available at: www.rcn.org.uk/professional-development/publications/pub-003146
- ▶ Royal College of Paediatrics and Child Health: www.rcph.ac.uk
- ▶ Information on use of specific vaccines: <http://www.patient.co.uk/health/immunisation-1366> **DN**

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WOUND DRESSINGS: SURGICAL DRESSINGS

Louise Smart, Claire Acton

This article, the first in our series on wound dressings, examines nursing care following a surgical procedure and the choice of surgical dressings for wound care. Surgical wound healing, if uncomplicated, has four phases. In surgery it is essential to provide patient support information and pre- and post-operative care. Dermatology nurses may also take on advanced practitioner roles and perform surgery. All dermatology nurses need to understand the evidence base of wound healing and the appropriate dressing choice for surgical wounds.

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KEY WORDS

- ▶ Dermatology surgery
- ▶ Post-operative care
- ▶ Surgical dressings
- ▶ Wound healing

Introduction

Skin cancer is increasing in the UK. Melanoma has increased by 360% since the 1970s and, in 2011, 98,400 non-melanoma skin cancers were registered, with 30-50% basal cell carcinomas and 30% squamous cell carcinomas going unrecorded¹. Surgery is the first line of treatment carried out by dermatologists, plastic surgeons and surgical nurse practitioners. Dermatological surgery can range from minor surgery such as curettage, shave or punch biopsies, to simple and wedge excisions, to more complex procedures, including flaps and grafts and micrographics surgery (Mohs). Patients undergoing dermatology surgery require pre- and post-operative care, including advice on managing their wound post-surgery. Different types of surgical

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procedure may require different dressings and wound care.

Surgical wound healing

There are four phases of healing in uncomplicated surgical wounds. The first phase is haemostasis, immediately after the surgical incision is made, resulting in haemostatic events — bleeding and platelets come into contact with collagen. This is called the coagulation cascade, activated through intrinsic and extrinsic pathways, and leads to platelet aggregation and clot formation to limit blood loss².

The inflammatory stage is phase two, starting with the initiation of molecular events leading to the infiltration of the wound site by neutrophils, which are responsible for phagocytosis, destroying and removing foreign bodies, bacteria and damaged tissue. After a few days, neutrophil activity changes once contaminating bacteria are removed and then redundant neutrophil cells are eliminated by a process called apoptosis, producing slough. The late inflammatory phase (48-72 hours after injury) is when phagocytosis occurs due to macrophage activity. A myriad of cellular activity produces tissue growth factors activating keratocytes, fibroblasts and endothelial cells starting wound repair. The last cells to enter the wound are lymphocytes, activated by interleukin, 72 hours after injury (surgical incision), which start

collagen regeneration. The inflammatory phase causes wound symptoms, including: oedema and swelling, increase in wound temperature, induration, change in skin colour; and sensation loss, itching, burning or pain — with possible loss of function, depending on site².

Phase 3 is the proliferation stage, when the immune response starts tissue repair. Fibroblasts proliferate for three days and an extracellular matrix, composed of fibrin and fibronectin is formed by the end of the first week (an essential part of the repair process) to establish the wound edges. Fibroblasts are then eliminated by apoptosis, resulting in the formation of a collagen matrix resulting in granulation tissue. New blood vessels are established, attracting neutrophils, macrophages and other cells to modulate cell growth and heal the wound by processes called adhesion, traction and epithelialisation².

The final phase of wound healing is the development of new epithelium and scar tissue formation. This occurs by synthesis and breakdown of collagen with more extracellular matrix remodelling due to collagen overproduction. Collagen fibres regain approximately 80% of their original strength after skin injury but original strength can never be re-gained. A scar will then form on the site of the surgical wound².

Nursing and dermatology surgery — practical considerations

Surgical wound management following dermatological surgery starts with an assessment of the patient and their wound, then the treatment and care pathway should be documented highlighting any complicating factors, for example, diabetes, venous insufficiency/arterial disease or immunocompromised conditions. The BDNG Quality Standards includes QuS25 on Surgical Techniques around the standard statement: 'The person requiring skin surgery will receive safe, effective treatment, education and information within a person-centred holistic environment'³. The BDNG QuS25 Surgical Technique standards include a reference of knowledge and evidence to support the structure, process and outcome key performance indicators and should be followed by dermatology nurses working in skin surgery³.

The following sections on pre-operative care; equipment and sterilisation; excision suture technique and wound closure, and post-operative care give a practical insight into dermatology surgical nursing care at Circle Nottingham NHS Treatment Centre.

Pre-operative care

Patients are given verbal and written information prior to their procedure on the surgical technique they will undergo. This depends on the area being treated as skin surgery involves superficial structures and is performed under local anaesthetic. The procedures performed range from simple excisions to complex, from flaps and grafts to wedge excisions to the ears. It is discussed before the procedure starts on the closure of a wound as sometimes patients do not have enough skin for a linear closure, therefore require further skin tissue from a different part of the body. At this stage patients are advised that they can have their wounds heal by secondary intention instead of having two wounds. Mohs is a precise surgical technique used to treat skin cancer. During Mohs surgery, the patient may undergo several episodes of surgery in one day where

thin layers of cancer-containing skin are progressively removed and examined, then re-excised until only cancer-free tissue remains.

Equipment and sterilisation

Prior to any surgical procedure, a surgical hand scrub is required to remove any debris and microorganisms from the hands, nail and forearms. This will reduce bacteria to prevent regrowth of microorganisms. An effective hand scrub (ensuring the entire hands, nails and forearms are included) with anti-microbial should take three to five minutes, as guided by the local infection control team. The hands are rinsed clean allowing the water to run from fingertips to elbow avoiding splashing onto the theatre attire. Drying the hands first, then the arms, with a sterile towel completes the hand scrub. All theatre staff who enter the restricted area of the dermatology operating department must don the attire intended for use within the surgical environment. Theatre attire consists of a two-piece trouser suit, disposable theatre hat and clean theatre shoes. The attire must stay dry to avoid any risk of contamination. It is important to wear a mask before washing the hands, as they are non-sterile and cannot be adjusted once you have scrubbed up.

Depending on the type of procedure sterile theatre gowns can be used; during skin surgery often sterile gloves only are required, which is in accordance with local policy. Sterile gloves are placed ready on a sterile trolley before allowing the scrub technician to open up the sterile trays and instruments ready for the procedure. Sterilising equipment eliminates all forms of microorganisms, reducing the risk of surgical site infections. Prior to incision, the skin is cleaned with an antiseptic solution. If hair removal is required, it should be clipped rather than shaved⁴. Preparing the skin reduces bacteria thereby reducing the risks of infection after surgery. Once the skin has been prepared, sterile drapes are placed around the surgical site. This creates a contamination-free area, maximising and maintaining asepsis.

Excision, suture technique and wound closure

Equipment in the surgical trays may contain sponge holders for prepping the skin, a scalpel blade holder to fit a number 15 blade (or a smaller or larger blade may be used depending on the body site), serrated toothed and non-toothed forceps for holding the skin tissue, skin hooks for retracting the skin when necessary, blunt dissecting scissors for undermining, a needle holder and stitch scissors. Diathermy may be required for haemostasis.

When deciding about wound closure, the surgical practitioner will take into account local skin tension in the area of the wound and look at primary and secondary wound closure. Most wounds will have buried (subcutaneous) stitches that will hold the wound together. These will dissolve over several months and do not need to be removed. Sutures that are superficial to the skin will hold the epidermal edges together. Depending on where the surgery has taken place on the body, the superficial sutures are generally removed by practice nurses. For surgery to the head and neck, they will need removing at around 5-7 days. For below the neck it is advised they remain in the skin for 10-14 days depending on how the wound came together. There may be several issues associated with sutures, for example, leaving the sutures in for longer periods can result in epithelisation over the suture. It is important to obtain the patient's medical history, documenting any risks that may cause concerns for wound healing and discuss this with the patient pre-operatively during consent.

Post-operative care: patient advice and suture removal

Once the surgical procedure has taken place, to prevent a haematoma a pressure dressing is placed over the wound. If a pressure dressing is not required, a simple absorbent dressing may be used which is comfortable, conformable and aesthetically pleasing for the patient. Or the wound may be left exposed depending on body site, bleeding and the surgeon's preference.

The patient receives both written and verbal instructions on how to look after their wound post-surgery. They are advised to leave the dressing in place for 48 hours before they can remove it. They can then wash the wound and apply a small amount of Vaseline® to prevent the wound from drying out. If a wound is not completely closed or has been left to heal by secondary intention, it is dressed with an absorbent dressing, such as alginate, according to local wound care formularies. The type of dressing is used to pack cavities to aid wound healing; a pressure dressing is usually placed over this and then replaced at regular intervals. Written information is given for the patient's practice nurse to carry out and for the patient (Figure 1).

Patients are given instructions for their practice nurse to remove their stitches at the appropriate time post-operatively. For patients who have a more complex procedure flap or graft, they are given an appointment back with the dermatology dressings nurse. Their dressings stay in place until they are seen again in the dermatology department.

Surgical wound dressings

The purpose of choosing the right dressing for the secondary healing wound in dermatological surgery is to aid wound closure until the wound is strong and to enhance healing⁵. Applying a dry dressing over a wound following a surgical procedure can cause trauma, as the dressing can stick to the wound, causing tissue damage⁵. When a surgical wound is healing by secondary intention, a moist wound healing environment is required. The aid of a dressing that prevents air from reaching the wound increases granulation, which will raise the amount of epithelialisation and will enhance scar healing⁶. However, too much moisture can cause maceration, which may affect the healing process. Once granulated, breathable dressings are required to prevent over-granulation.

What are the qualities of an ideal surgical dressing?

- ▶ Soak up exudate: Absorbent

WOUND ADVICE — PRESSURE DRESSING

This dressing has two layers. Directly over the wound you have micropore tape to support the wound edges, this needs to stay in place until you have your stitches out. If this becomes loose you may reapply more tape.

Over the tape will be cotton dental rolls, these splint the wound and apply pressure to control any bleeding. These may be gently removed after 48 hours, by yourself or carer:

Try and keep the area as dry as possible until you have your stitches removed, unless otherwise directed by the doctor or nurse.

Please avoid all exercise or exertion on the day of surgery and as directed by the doctor or nurse. Smoking should be avoided as it impairs healing and could be a potential fire risk to the dressing over your wound. As alcohol increases the risk of bleeding it is important to avoid any alcohol for the first 24-48 hours after surgery.

If bleeding starts, apply firm continuous pressure to the wound for 15 minutes. If bleeding persists contact the department on the number below.

If you have any pain or discomfort following your operation, take paracetamol but avoid aspirin or anything that contains aspirin, eg Anadin®, Disprin® or Nurofen® (ibuprofen). If aspirin has been prescribed by your GP, please do not discontinue use unless told to do so.



Once the stitches are removed the wound will get stronger over the next 6-8 weeks. You may apply tape or Steri-Strips™ directly over the wound for support as it heals.

As the wound heals, sometimes the body may try to reject the dissolvable stitches located under the skin. A white or clear stitch will often become visible. This can be easily snipped off flat to the skin surface by your practice nurse. Please do not attempt to pull the stitch as this can cause trauma to the scar.

You will usually be given a follow-up appointment to come back to clinic for the results of your surgery. You may bring someone with you for support. You may be informed of your results via a telephone call.

If you have any pain, swelling or spreading redness that persists and you are concerned about your wound, please call the Dressings mobile and leave a message and someone will get back to you.

Out of hours: Patients are required to contact their GP's out-of-hours service or 111.

In an emergency: Patients are required to attend the emergency department.

Please note that we are unable to give results of your surgery over the phone.

Figure 1. Wound advice sheet — Pressure Dressings: Circle, Nottingham NHS Treatment Centre — an example of a wound care patient information sheet.

dressings are designed to absorb exudate while reducing adherence to the wound bed. Some absorbent dressings form a gel on contact with fluid. However, leaving a dressing on the skin for too long can cause maceration, which in time can damage the skin⁷. The amount of exudate produced by a wound will determine the most suitable dressing, so local wound care formularies should be adhered to.

- ▶ Maintain moist wound healing environment: Maintaining a moist wound facilitates the wound healing process⁸. The impact of keeping a wound moist will prevent the area from dehydration and cell death. For example, the use of hydrocolloid occlusive dressings in making a moist wound environment has been proven to promote re-epithelialisation and reduce scar formation.



Figure 2

Applying a pressure dressing: cover wound with surgical tape, place dental roll, apply pressure and firmly tape.

- ▶ Contain no organisms or fibres that may contaminate wound: Alginate dressings are made up of calcium and sodium fibres from seaweed. They conform to the shape of the wound, allowing the dressing to absorb moisture and exudate. However, this type of dressing can hydrate the wound bed, allowing it to be non-adherent to prevent wound bed trauma to the healing tissue and it does not leave fibres in a wound⁹.
- ▶ Be impermeable to bacteria: Iodine dressings can be used on surgical wounds as they have the ability to lower the microbiological load in wounds⁴.
- ▶ Cause minimal injury when removed: Non-adherent dressings are used on light to moderate exuding wounds. Other options include soft silicone dressings for use on fragile skin, which are designed to reduce the number of dressing changes and reduce disruption to wounds and their surrounding skin¹⁰.

Types of surgical dressing

Basic dressings

When choosing which dressing to apply to a wound, consider the amount of exudate expected. A wound that may leak a small amount of fluid can be covered with a non-adherent occlusive dressing.

Pressure dressings

These consist of two layers, a primary or basic dressing, followed by pressure. The second layer can be rolled or folded gauze or dental rolls. The second dressing is firmly held in place with tape. The primary dressing protects the wound

while the secondary dressing provides compression to reduce the open space in a wound, preventing a haematoma and reducing oedema. (Figure 2.)

Secondary intention healing dressings

Secondary intention wounds need to be packed with an absorbent dressing. Alginate dressings are absorbent; they are placed/packed into the wound to fill the space. They are designed to soak up any exudate, promoting wound healing and encouraging debridement, and need to be changed every 2-3 days. During wound healing, exudate levels change. The wound should be reassessed and an alternative to alginate should then be considered.

Dressing difficult areas

Dressing a difficult area incorrectly can lead to problems with wound healing. For example, when applying a pressure dressing too firmly, it could stop the blood supply, causing the area to heal poorly. Dressing an ear or a nose can be difficult due to the contour of the area (Figure 3). Using small steps can create sufficient pressure. Cover the area with surgical tape slightly bigger than the wound, then apply gentle pressure while holding the dental rolls in place, moulding the surgical tape to the shape of the area. This should and will provide adequate pressure, aiding wound healing and haemostasis.

Conclusion

Dermatological surgery is performed to diagnose and treat most skin cancers. It is important for the surgical nurse to have a good understanding and knowledge



Figure 3

Use small steps to dress difficult, contoured areas. Mould surgical tape over dental roll to keep it in place.

of pre-, peri- and post-operative care, as this is essential when caring for patients who are preparing for and undergoing surgery. During the post-operative stage the nurse will help select the appropriate dressing and give the patient information on surgical wound care and dressing management. This will include written and verbal instructions on caring for their wounds, including suture removal.

Article continues overleaf

SSIs AND OTHER SURGICAL WOUND COMPLICATIONS

COMMENTARY FROM TISSUE VIABILITY NURSE, CLAIRE ACTON

The majority of surgical wounds will heal without any complications within 7-10 days, however this depends on the type of surgery undertaken. Some surgical wounds will not heal and/or will break down, the most common post-operative complication being Surgical Site Infection (SSI). Other related causes are post-operative blistering and wound dehiscence that can be due to SSI, and comprises 20% of all healthcare-associated infections (HCAIs).

5% of patients will develop an SSI after surgery¹. This could be anything from a small amount of wound discharge to life-threatening post-operative complications such as abdominal wound dehiscence or a sternal infection. These impact on the patient's quality of life and result in increases in healthcare costs of £3,500 per episode¹.

To the healthcare professional this poses challenges, as we will quite often see these patients once the wound has already broken down, so it's important to ensure involvement within the multidisciplinary team to review pre- and intra-operative intervention to prevent SSIs, as well as post-operative management strategies.

An SSI will usually occur within 30 days following surgery and is described as¹²:

- ▶ Superficial incisional SSI — occurs in the area where the incision was made.
- ▶ Deep incisional SSI — occurs where the incision was made but extends to the muscle tissue and fascia.
- ▶ Organ or Space SSI — occurs in any area of the body other than skin, muscle or tissue to the body organ or a space between organs. (It's important to understand what type of wound breakdown has occurred as this will affect the type of management required.)

This can be particularly challenging to document as patients are much more quickly discharged from hospital, so it should be ensured patients receive

adequate information on post-operative care and signs of infection and what to do if they are concerned¹¹. Initially it is important to ensure post-operatively the dressing is not removed for 48 hours unless there are clear signs of the following:

- ▶ Excessive inflammation (redness and swelling)
- ▶ Specific wound pain or pressure at the site as reported by the patient (cannot be controlled with analgesia)
- ▶ Part or full dehiscence (separation of wound edges)
- ▶ Excessive exudate or leakage of fluid through the dressing.

If there is evidence and an SSI is suspected, it is usual for antibiotics to be considered but this will be dependent on local policy.

To ensure correct management options are considered, a tool should be utilised that enables the identification of barriers to the wound healing and a management plan should be implemented that promotes wound healing and addresses all the factors that affect how wounds heal. The TIME concept guides the nurse as to how to achieve this in such areas as¹³⁻¹⁵:

- T** Tissue management (non viable)
- I** Infection or inflammation
- M** Moisture imbalance
- E** Edge; advancement of the epithelial edge

This assessment may require the implementation of more advanced practices such as surgical and sharp debridement, Topical Negative Therapy and advanced wound dressings.

NICE guidance⁴ suggests that referring the patient for tissue viability review for assessment and management options is recommended to ensure the facilitation of a rapid resolution to wound breakdown. Ultimately prevention is the key element, however identification of an SSI and early intervention from specialist services will improve overall outcomes for patients and the associated costs of re-admission and advanced wound care intervention.

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A PHENOMENOLOGICAL STUDY OF THE PSORIASIS PATIENT RECEIVING HOME PHOTOTHERAPY

Bev Gambles

Abstract

Background: Psoriasis is a common skin disorder. A popular choice of treatment is hospital-based narrowband ultraviolet B (NB-UVB). However, this incurs disruption to lifestyle due to travel, time and work commitments. An alternative way of delivering NB-UVB is self-administration in the patient's home. **Aim:** Despite extensive research relating to the efficacy of phototherapy, no literature identified has explored the experiences and beliefs of psoriasis patients regarding home phototherapy. The aim of the study was to obtain an understanding of the lived experience of a group of patients receiving treatments in their home. **Method:** A phenomenological study was undertaken to explore the lived experience of patients who received a course of home phototherapy for psoriasis instead of conventional phototherapy treatment in secondary care. **Results:** The study revealed that living with psoriasis can place an enormous burden on patients and their families. Patients embraced the concept of home phototherapy, which has minimal disruption to lifestyle. **Summary:** Home phototherapy goes some way to giving patients more autonomy and control over their condition. There is a need to change treatment attitudes and concentrate on the benefits of this treatment modality rather than the risks.

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KEYWORDS

- ▶ Psoriasis
- ▶ Phototherapy
- ▶ Narrowband ultraviolet B (NB-UVB)
- ▶ Home phototherapy
- ▶ Patient's experience
- ▶ Phenomenology

Introduction

This research was undertaken as part of a master's degree. The study utilised a phenomenological approach to capture the lived experience of a group of patients receiving home phototherapy for psoriasis. The

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essence of phenomenology allows the researcher to understand the unique lived experience of a person or group of people who share similar situations. This research methodology was chosen as it is patient focused. Semi-structured interviews were conducted in order to extract common themes among these patients, which enabled the researcher to understand the phenomena being studied.

Background

Approximately 2% of the population suffer with psoriasis, a chronic skin condition that is generally managed in primary care¹. However, the relapsing and remitting nature of the condition presents a challenge to treatment options.

Psoriasis presents in a number of ways and distinct treatments are deemed necessary for different types

KEY POINTS

- ▶ Psoriasis is a common skin condition affecting approximately 2% of the population.
- ▶ Psoriasis has a significant negative impact on quality of life.
- ▶ Hospital-based phototherapy is a popular choice of treatment but has drawbacks.
- ▶ Home phototherapy is shown to be safe, effective and cost-effective.
- ▶ There is a need to change the way in which phototherapy is delivered in the future.

of psoriasis. The majority of patients attempt to keep their psoriasis under control with topical preparations. Occasionally both general practitioners and patients require additional help and treatment from dermatologists and nurses within secondary care. Failure to obtain clearance of psoriasis with topical preparations may lead to a course of phototherapy in the secondary care setting. However, there are recognised drawbacks to attending the hospital for phototherapy. Although in the majority of cases phototherapy is well tolerated, it places a significant burden upon the patient and will incur cost in time, monetary expense and travel. Patients living at a distance from the phototherapy unit may find this treatment option less acceptable and, due to these constraints, may be forced into accepting stronger treatments that potentially have greater side-effects².

In 2006 the White Paper 'Our Health, our care, our say' outlined a change of opinion regarding the way in which healthcare should be provided in the future: bringing care closer to home — and even into the home — of the patient.

An awareness of the work of Cameron et al³ in Scotland and Koek and colleagues⁴ in Holland regarding the delivery of home phototherapy led to a desire to explore this concept further. Koek et al⁴ highlight concerns that, for patients in the Netherlands, the obstacle to receiving phototherapy is not so much distance from a phototherapy unit but more of an issue of convenience, as treatments are time-consuming both from the patient and staff perspective. Koek and colleagues' pilot project into home phototherapy addressed issues of cost-effectiveness, quality-adjusted life-years (QALYs) and safety^{5,6}, but did not explore the lived experience of the patient self-administering a course of home phototherapy. For many patients this would seem to be the ideal way to deliver UVB phototherapy treatment,



Figure 1

Patient receiving a detailed educational session prior to home phototherapy.

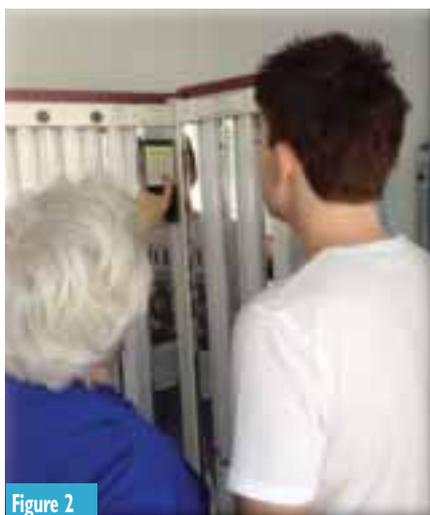


Figure 2

Inputting dosage into UVB panel.

eliminating the time and effort needed to attend a hospital.

In 2006 the White Paper, 'Our health, our care, our say' outlined a change of opinion regarding the way in which healthcare should be provided in the future: bringing care closer to the home — and even into the home — of the patient⁷. Self-treatment of psoriasis with home phototherapy is a treatment method that could potentially fit into the 'care closer to home' objective. The high throughput of phototherapy treatments over the last 50 years is an indication of the success of UVB phototherapy in the management of psoriasis² but a patient's treatment regime needs to be tailored to the patient's needs and circumstances.



Figure 3

Demonstration of the UVB panel in use.

Aim of the study

This study aimed to obtain an understanding of the lived experience of a group of patients in self-treating with narrowband ultraviolet B (NB-UVB) home phototherapy. Patients who are receiving UVB phototherapy in an outpatient setting have the benefit of treatment delivered in a 'safe' setting where therapy decisions are made on their behalf by experienced phototherapy nurses. Patients who are treating themselves in the home may view their treatment with trepidation; they may approach the treatment regime with more caution than necessary. Although many qualitative pieces of research have been conducted which explore the lived experience

of the patient with psoriasis⁸⁻¹⁰, no literature explored the lived experience of the psoriasis patient receiving home phototherapy.

A literature review revealed several studies on home phototherapy. Sarkany et al¹¹ investigated the potential role of home phototherapy and suggested that, if available, patients may prefer it to hospital-based treatment. His report concluded, however, that home phototherapy would be an inferior treatment to hospital-based phototherapy and would pose a greater risk to the patient; lack of supervision in home phototherapy would compromise safety and efficacy and may lead to episodes of photo-toxicity. Additional concerns raised by Sarkany et al¹¹ regard patient selection: patients must be considered intelligent enough to fully understand instructions given by healthcare professionals and be aware that serious burns will result if the dosing schedule is not adhered to.

Over the last 50 years concerns have been raised regarding the long-term risks associated with phototherapy. However, a literature review by Lee et al¹² concluded that the carcinogenic potential associated with NB-UVB treatment is very low and as a result they recommend that NB-UVB is a safe and effective treatment for psoriasis.

Cameron et al³ reported on results of a questionnaire they distributed to patients who had been referred for hospital phototherapy. Results of the questionnaire showed that 42% of respondents found attending for hospital-based phototherapy inconvenient and 75% felt that home phototherapy would be advantageous.

Research methodology and methods

Approval for this study was sought from the South East Wales Research Ethics Committee and the University of South Wales Ethics Committee.

A qualitative phenomenological approach to the study was utilised. Participation in the study was limited to psoriasis patients only. Seven patients with psoriasis from the Local Health

Table 1.

Research participants (pseudonyms).

Name	M/F	Age	Age when psoriasis started	Occupation	Additional information/constraints to having hospital-based phototherapy
Sue	F	54	39	Retired/disabled	Poor mobility. Non-driver. Lives 25 miles from local unit. No previous treatment.
Jim	M	50	7	Teacher	Married. No previous UV treatment. Lives 30 miles away.
Fred	M	54	3	Shop worker	Married. Lives 28 miles from unit. Has had PUVA and UVB.
Lisa	F	45	35	General practitioner	Two young children. Lives 20 miles away from unit. Has had UVB three times previously.
Rose	F	44	3	Housewife	2 children. Previous UVB. Lives 26 miles from unit.
Peter	M	45	18	Garage owner	Lives 25 miles away from local unit. Married. Systemic medication caused side-effects.
George	M	37	16	Accountant	Married with three young children. PUVA and systemic treatment in past.

BOX 1

Inclusion and exclusion criteria into the study.

Inclusion criteria

1	Adult patients aged over 18 must be referred by consultant dermatologist for phototherapy
2	Patient must be able to demonstrate understanding and safe use of the equipment following an educational session with the phototherapy nurse
3	The patient is unable to attend hospital for phototherapy treatments
4	The patient has a home that is suitable for home phototherapy equipment for the duration of the study
5	The patient agrees to sign a treatment consent form which includes the risk of UVB phototherapy (and a statement about not using the equipment in an unauthorised way to treat others).
6	The patient must agree to be contactable and accessible for remote consultations throughout the course of home phototherapy by telephone or internet.

Exclusion criteria

1	Children (under the age of 18)
2	All patients who are unable to stand for more than 10 minutes at a time
3	Patients with mental incapacity
4	Patients for whom phototherapy is contraindicated
5	Female patients who are pregnant or lactating

Board were purposefully selected to receive a course of phototherapy in their home (Table 1). Following completion of a course of treatment, rich data of patient perceptions was gathered through in-depth semi-

structured tape-recorded interviews and participant observation.

Research participants were over the age of 18. Some patients had previously received a course of UVB or PUVA;

others had not. Patients recruited to the study had initially been seen by a consultant dermatologist and were considered suitable for a course of UVB phototherapy treatment. However, due to a number of barriers (financial, work, cost, distance to travel and home circumstances) were unable to have this treatment in the secondary care setting, and were offered home phototherapy as an alternative type of treatment (Box 1).

The research method chosen was semi-structured, one-to-one, in-depth interviews between seven patients receiving home phototherapy and a phototherapy specialist nurse. Interviews were either conducted in the author's place of work or in the patients' homes, wherever patients felt most comfortable. Interviews were only concluded when data saturation had been reached.

Following the method outlined by Colaizzi¹³, interviews were taped, transcribed and grouped into sub-themes, eventually forming five major themes which gave the essence of the phenomena — the lived experience of the psoriasis patient receiving home phototherapy.

Colaizzi's method of data analysis¹³ required the researcher to go back to the participants to validate the results. This enhanced the rigour of the research findings and reassured the researcher that statements made by the participant had not been misconstrued.

Emerging themes (Figure 4)

1. Emotional roller coaster

Participants described living with psoriasis as a constant emotional battle. Anxiety frequently triggered an outbreak of psoriasis, which exacerbated anxiety and worsened the condition. Without exception, participants stated that having psoriasis caused unwanted negative feelings and severely limited lifestyle with impairment to quality of life. Having psoriasis at an early age had a major influence on the patients' development and subsequent behaviour in later life.

Fred: *I've battled with psoriasis for 50 years; I've had my ups and downs with it. It's a battle.*

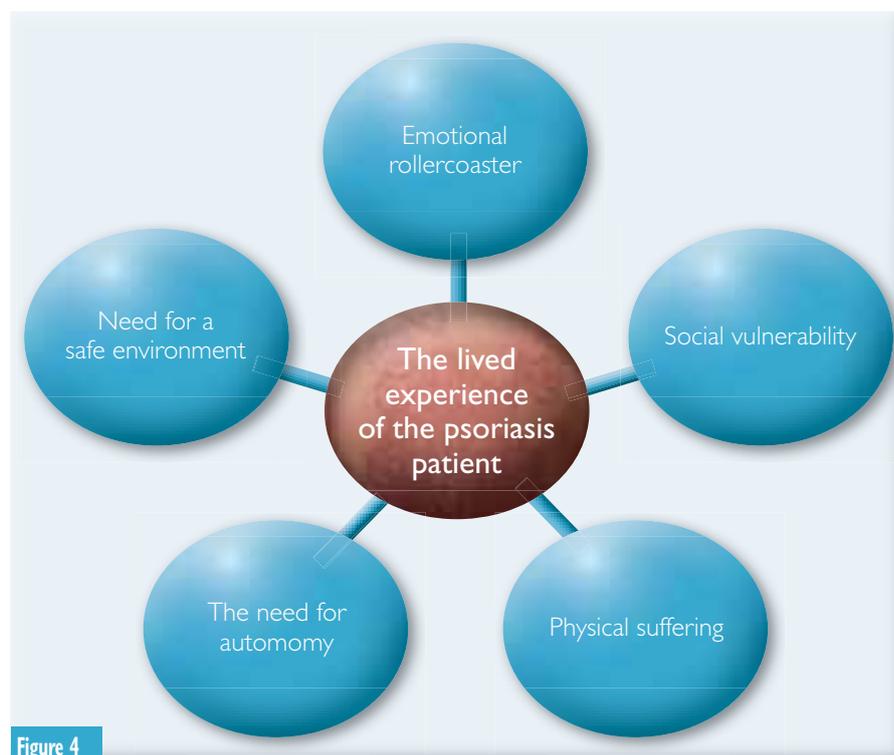


Figure 4

Themes that emerged in the patient interviews.

Rose: *It affects your self-esteem, it affects your... you feel quite ugly. I think when you are in it, up to your neck in it, it really connects to your being, and then how you evolve as a human being is with the psoriasis dictating it. It shapes you.*

As children, all were aware of their body image and can recall being on the receiving end of damaging, hurtful remarks about their skin from other children. For some it was a major source of shame. Rose, in particular, found it very difficult to form friendships in school and became socially isolated.

Rose: *No one knew I had it, it was my terrible secret. My PE teacher said "take your socks off"... and you feel you haven't got a voice and you're desperate for people not to notice. So I took my socks off and all the kids went aah...too late by then. I had been seen.*

2. Social vulnerability

Participants were aware that the condition affects all members of the family. Limitations are imposed not just on the person affected, but also on partners and children. Participants had an unwillingness to expose their skin publicly, either in a gymnasium, swimming pool or hairdressers.

George: *Swimming, I just don't do any more. I sit and watch my wife and daughter from the café.*

Sue recalls that family holidays were restricted by her reluctance to expose her skin: *We didn't go on holiday in the summer. We used to leave it until the winter and then go, 'cos you know in the hot weather you didn't want to be sat on the beach unless I was...hiding...you know?*

Although Peter stated he is better able to cope with it now that he is older; he admitted it still affects him psychologically and recognised that it has an impact on the family: *My poor wife she has a lot to put up with, all the extra cleaning and things. The bed gets covered in blood and mess, I drop scale everywhere.*

Lisa described feeling self-conscious when bearing her arms in the summer: *You can't wear what you want; you become embarrassed about going swimming or to the gym and you feel that people are looking at you.*

Self-consciousness is a particular problem for Jim: *You feel like you should*

have a bell ringing as you're walking...like a leper.

3. Physical suffering

Many patients argue that one of the worst aspects of having psoriasis is the scaling, cracking of skin and itch associated with the condition. Participants described an increase in housework associated with the loss of scale; creams and ointments used are messy and time-consuming and for some patients are fairly ineffective. Participants were often perplexed as to why psoriasis failed to respond adequately to treatment.

Jim: *This psoriasis was like a fine dust. It went into all the little grooves in the car and you couldn't get rid of it. It seemed sticky.*

Fred: *I had the stuff you rub in; all over me, it was horrible. I got to the point when I used to think it's not gonna work anyway, what's the point?*

George: *It's really unpleasant stuff to use. The cream is greasy and it's not nice before going to bed and all your clothes stick to it.*

Peter: *After a really long hard day in work you forget to use it, and all of a sudden it's got bad again, and it's just really, really frustrating.*

4. The need for autonomy

Participants wanted an effective treatment that had a minimal impact on lifestyle. Adherence to treatment impinges on lifestyle choices: the desire to be free of psoriasis is always offset by strict treatment regimes. Participants felt that the burden of treatment activity was not always appreciated by healthcare professionals. Fred remembered having a course of PUVA at his local hospital: *I came after work. It's a drag. I left work at 4pm then back home at 6.30pm. Twice a week. A couple of times I cancelled with work commitments. Yeah, it's a drag.*

Some patients choose not to have systemic medication for disease management due to side-effects associated with these potent drugs. For Lisa, the side-effects outweigh the

benefits: *Psoriasis does affect my life on a day-to-day basis but the risks of systemic medication would be... I don't want to take those risks for the benefit it would gain really.*

Peter found the side-effects of systemic medication unacceptable: *The drugs, I didn't like the side-effects, my blood pressure went up and I felt dizzy. I lost my hair with one drug and my lips were sore.*

Reluctance to take systemic medication is sometimes viewed by the dermatologist as non-compliance.

5. The need for a safe environment

Participants identified that an accepting family is essential for their wellbeing. Family members who are supportive can help lessen the burden of this condition. A safe environment was considered to be one where there was support, minimal side-effects of treatments, the security and comfort of having treatment in their own home and good supervision in home phototherapy with accessibility to the phototherapy specialist nurse.

Sue: *It was wonderful because you were at the end of the phone, it was wonderful, wonderful. Once you got used to it you just knew what you were doing. No... It was wonderful 'cos it was in your own home. I'm so happy, 'cos it's changed my life completely.*

Rose: *The fact that I've got three young children at home, to be able to do it at home took all the stress away, and it was brilliant, very straightforward.*

George: *I thought it was excellent, I would only ever follow the guidelines, I wouldn't do anything to jeopardise...*

Jim: *Well, it's all about significant risks you know, and there's risks crossing the road.*

Discussion

All skin conditions impose a huge burden on a person's wellbeing¹⁴ and have an impact on the body's equilibrium and subsequent behaviour^{15,16}.

Psoriasis is without doubt a distressing disease, associated with

many psychological, physical and social implications.

Yasuda et al¹⁷ highlight that healthcare professionals need to understand what psoriasis patients want. Poor treatment regimes lead to lack of compliance and increase in symptoms. Uhlenhake et al¹⁸ explored patient and physician expectations and found that patients want more information regarding the skin disorder; treatments with quicker clearance rates and for the healthcare professional to have recognition of the emotional burden of psoriasis.

The fear of social rejection is frequently cited by patients as reasons for not undertaking social activities. In the study conducted by Ginsburg and Link¹⁹, 19% of respondents stated that on more than 50 occasions they had experienced negative reactions in public areas such as hairdressers and swimming pools.

Unsurprisingly, there are similarities in some of the themes identified by Uddin and Howman⁸, Howard et al¹⁰ and the researcher, which is an inevitable outcome where the lived experience of a group of patients with a comparable skin condition is scrutinised.

The participants in this study supported the concept of home phototherapy. No participants expressed anxiety regarding the side-effects of the treatment. All were aware of the potential risks of skin cancer and burning, but were not deterred from having a course of treatment. Koek and colleagues' study⁴ found that home UVB and hospital UVB had similar efficacy, rates of adverse events and cumulative dosages². In addition, it was noted that participants adapted very easily to the home phototherapy treatment. No participants experienced any adverse side effects from the treatment²⁰ and all achieved good clearance of psoriasis at the end of the course of treatment.

Although dermatologists remain in conflict regarding the safety profile of home phototherapy⁴, it is generally considered that risks associated with UVB treatment are low, as long as

guidelines are adhered to and a robust system of clinical governance is in place².

Conclusions

It is clear that some patients with psoriasis adapt better than others. A supportive family and close network of friends who accept the patients for who they are and not what they have is important for their wellbeing. Psoriasis patients relate that quality of life is directly associated with disease clearance. When skin is clear they feel better able to cope; when psoriasis is present it can be the cause of low self-esteem.

Limiting access to the home phototherapy service not only denies patients the freedom to choose treatments that may be preferable to them, but incurs significant costs if they are prescribed more expensive systemic treatments.

The emotional and physical wellbeing of the patient is dependent on a treatment that works; patients do not want topical therapies applied for weeks, or even months, at a time. For patients who fail on topical therapies, the next logical step in the treatment plan is generally phototherapy. Limiting access to the home phototherapy service not only denies patients the freedom to choose treatments that may be preferable to them, but incurs significant costs if patients are prescribed more expensive systemic treatments. Additionally, secondary care phototherapy is often associated with a lengthy wait to start treatment, financial and social implications due to work, family, distance to travel and time. Home phototherapy goes some way to providing a service that gives the patient more autonomy and control over their disease. The cautious approach adopted by dermatologists is understandable. However, there is a need to change treatment attitudes and concentrate on the benefits of this treatment modality

rather than the risks. To enhance quality of life, self-management needs to be encouraged. **DN**

"Home phototherapy was like a breath of fresh air, because I had 27 years of struggling, knowing what works for me and not being able to access it. Doing it at home was straight to the solution, and um, it was fantastic" (Rose).

Declaration of interest

Bev Gambles is a Phototherapy Specialist Nurse at the University Hospital of Wales in Cardiff. This phenomenological piece of research was undertaken as part of an MSc in Clinical Research at the University of South Wales.

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PSYCHOLOGICAL NEEDS AND AVAILABILITY OF SUPPORT FOR PEOPLE WITH ROSACEA AND PSORIASIS: FINDINGS FROM A GP SURVEY

Marta Krasuska, Abigail Millings, Anastasia Lavda, Andrew Thompson

The psychological impacts of living with a skin condition have been widely acknowledged. Provision of psychological support is crucial in improving wellbeing and symptoms among both adults and children with skin conditions. The aim of this brief survey — which is part of a wider study — was to investigate General Practitioners' provision of psychosocial care for people with rosacea and psoriasis.

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KEY WORDS

- ▶ Psychodermatology
- ▶ Psychological support
- ▶ Rosacea
- ▶ Psoriasis
- ▶ Patient's experience
- ▶ General Practitioners (GPs)

Introduction

The psychological impacts of living with a skin condition have been widely acknowledged¹⁻³. Common psychological difficulties include increased levels of anxiety and depression, concerns with body image, lowered self-esteem, worry about social interactions and fear of negative evaluations⁴.

Importantly, the evidence indicates that the magnitude of psychological distress experienced by people with skin conditions is not directly associated with the objective severity of their dermatological symptoms⁵.

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While some individuals adjust well, others might experience significant levels of distress, which can exacerbate symptoms and have an impact on treatment outcomes⁶.

Provision of psychological support is crucial in improving wellbeing and symptoms and, although there is limited research, psychological interventions seem to be effective for both adults and children with skin conditions^{7,8}. The need to have access to psychological interventions has been advocated in a number of recent guidelines and recommendations⁹⁻¹². For example, the NICE guideline for the assessment and management of psoriasis indicates that the effect of psoriasis on psychological and social wellbeing should be assessed as part of routine management, and psychological support should be provided when necessary¹². However, some recent surveys have reported that these guidelines are frequently not being implemented and that access to psychological services in secondary care remains severely restricted¹³. Both lack of resources and inadequate training have been stated as being responsible for the insufficient provision of psychological care in dermatology¹⁴.

While the psychological impact of psoriasis has been well documented³, the psychological issues associated with rosacea

are less well recognised, perhaps due to seemingly less severe physical symptoms in comparison with psoriasis, or to the historical lack of available treatment for less severe cases^{15,16}. Nevertheless, it has been shown that rosacea is associated with psychological effects such as heightened levels of anxiety and depression², and evaluation of psychosocial distress is recommended when providing treatment for rosacea patients¹⁵.

Aim

The aim of the present survey was to investigate general practitioners' provision of psychosocial care for patients with rosacea and psoriasis. In the survey we aimed to obtain views from GPs with a special interest in dermatology (GPwSIs), as we believed these GPs might have a unique insight into the needs of patients with skin disease. The survey forms part of a larger study that has examined the psychological needs of people living with rosacea and psoriasis.

Methods

This was a cross-sectional survey study. Two methods of approaching participants were used. First, members of the Primary Care Dermatology Society (PCDS) were sent an email inviting them to take part and were provided with a link to the online version of the survey. Second, we distributed the paper

version of the survey to GPs who attended a 'Skin Matters' dermatology interest group meeting held in Sheffield in March 2015. The survey was administered either online or as a paper copy at the meeting. Participants were offered entry into a prize draw with the possibility of winning a high-street voucher:

- The survey consisted of closed- and open-ended questions enquiring about:
- ▶▶ Number of patients with rosacea and psoriasis seen on average
 - ▶▶ Typical presenting symptoms
 - ▶▶ Frequency of psychological difficulties described in routine consultations
 - ▶▶ Use of validated tools to assess psychological distress
 - ▶▶ Availability and type of psychological support offered.

Findings

The survey was completed by 48 GPs (40 in England, 5 in Scotland and 2 in Wales). The overall findings from the survey indicated that, while GPs are aware of the psychological impact of both rosacea and psoriasis, the psychological needs of both patient groups were described as not being met. GPs reported that this was largely due to a lack of available services.

On average the GPs saw 3 patients with rosacea and 7 with psoriasis per month. Over 75% of GPs indicated that, in their experience, patients with both conditions often presented with psychological needs (76% for rosacea and 79% for psoriasis). The most commonly reported psychosocial symptoms for both conditions were concern over appearance associated with feelings of embarrassment. Patients were also described as being concerned by the physical symptoms, including erythema, papules and pustules and facial redness for rosacea, and itch and scaling for psoriasis.

Only 6% of GPs used a validated tool to assess psychological impact of rosacea and 23% used a validated tool to assess the psychosocial impact of psoriasis. The Dermatology Life Quality Index (DLQI), Generalised Anxiety Disorder Scale (GAD-7), and Patient Health Questionnaire (PHQ-9: to measure symptoms of depression) were reported as being used by the respondents. Less than 15% (11% for rosacea and 13% for psoriasis) reported being able to refer patients to a psychologist or other

psychological services and 85% of the respondents commented that specialised psychosocial intervention for patients with dermatological conditions should be made available. Indeed, more than half of the respondents (62% for rosacea and 55% for psoriasis) indicated that they did not have access to any form of psychological support for these patient groups. The remaining respondents indicated that they were able to refer their patients to Improving Access to Psychological Therapies (IAPT) or had recommended patients to contact charities (eg, Changing Faces or the Psoriasis Association).

Conclusions

This brief survey provides further evidence that the psychological needs of patients with both psoriasis and rosacea are sadly not being adequately met within primary care, despite GPs' awareness of this need. This suggests that dermatology nurses may need to advocate for patients with both psoriasis and rosacea and proactively support them in seeking psychological support from their GPs. For this to happen dermatological nurses must be up to date on the latest recommendations for carrying out psychosocial assessments in clinic¹⁷.

There are a number of limitations associated with this survey that might affect its representativeness, such as the small sample size and the fact that the participants were medics with a specific interest in skin conditions. Therefore the findings may not be representative of typical experience in General Practice. Nevertheless, the survey findings add weight to the need to provide greater provision of appropriate and economical psychological support to dermatology patients¹⁷. The findings also highlight that recent guidelines on the assessment of quality of life and psychological distress are not being adhered to and dermatology nurses may also need to play a role in ensuring that colleagues are adhering to good practice¹³.

Acknowledgements

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FOCUS ON TREATMENT DEVELOPMENTS IN THREE LESS COMMONLY RESEARCHED CHRONIC SKIN DISEASES

Kathy Radley, Senior Lecturer, School of Life and Medical Sciences, University of Hertfordshire, and Project Coordinator, Eczema Education Programme, Guy's and St Thomas' NHS Foundation Trust, reviews recent studies on hidradenitis suppurativa, rosacea and vitiligo.



First study

Citation

Ingram JR, Woo PN, Chua SL, et al. Interventions for hidradenitis suppurativa (Review). *Cochrane Database Sys Rev*, 2015, Issue 10. Available at: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010081.pub2/abstract>

Context

Hidradenitis suppurativa (HS) is a chronic, inflammatory skin condition characterised by recurrent, painful boils in flexural sites¹.

The objective of this systematic review is to assess the effects of interventions for HS in people of all ages. The HS Priority Sharing Partnership in 2013² identified a gap in evidence for treatment of HS and this review is a starting point to address these gaps.

Methods

The systematic review included randomised controlled trials (RCTs) of interventions for HS. RCTs were included for any intervention and the participants required a clinical diagnosis of HS made by a medical practitioner. Interventions were grouped into three categories; pharmacological, surgical and other interventions. Primary outcomes measured were quality of life (QoL) and adverse effects, with secondary outcomes being global assessment by patients and physician,

Kathy Radley

Background

This quarter's Research Corner takes a focus on chronic skin disease. In dermatology, when considering the term chronic skin disease, it is often the 'big three' that spring to mind — eczema, acne and psoriasis. The three studies chosen avoid the 'big three' and focus on chronic skin diseases which, although common, attract less funding and research: hidradenitis suppurativa (HS), rosacea and vitiligo. HS affects 1% of the European population¹, rosacea 1-22%² and vitiligo 1% worldwide³. These papers all have a valuable role in providing evidence base for the management of these conditions.

pain, hidradenitis severity score and duration of remission. 12 RCT studies including 615 participants were included in the review.

Key findings

Many of the 12 studies reviewed had methodological flaws leading to the quality of the evidence being downgraded. Only 4 trials reported on outcome of QoL, all reported on adverse effects. Please refer to the systematic review for the details of the trials, as the report below is a brief summary. The web link to the full review is included in the citation above and will also give access to the Cochrane database of systematic reviews.

In the pharmacological studies, the trials of anti-TNF α infliximab dosed at 5mg per kg and adalimumab dosed weekly showed improvements in outcomes and rated as moderate quality evidence.

Topical 1% clindamycin solution showed improvement in outcomes with evidence also rated as moderate. Oral ethinylloestradiol and cyproterone acetate and ethinylloestradiol and norgestrel both identified improvements with the evidence-rated moderate.

One study reported an improvement in the patient-reported global assessment looking at oral tetracycline but the evidence is graded low. In surgical interventions the use of gentamycin sponges versus primary closure alone showed improvements with the evidence graded as moderate quality.

In the other interventions group, no laser or light intervention identified any improvement in

outcomes graded above low quality of evidence. Subcutaneous injections with *S. aureus* lysis showed improvement in outcomes graded moderate quality, although this is an old study⁶ and has not been repeated since.

Commentary

This systematic review has not identified any trials where the improvement in outcomes led to high-quality evidence. The strongest evidence came from the trial indicating the use of weekly dosed adalimumab (double the dose licensed for psoriasis). There is no evidence for the use of many oral systemic agents currently used to treat patients with HS. Validity and clinical meaningfulness of the outcome measures for HS leads to a lack of clinical trials of a quality for inclusion in a review such as this.

Implications

Five ongoing trials considering the efficacy of biologics in HS have been identified from trial registers but currently there remains little robust evidence for the treatment of HS.

Second study

Citation

Taieb A, Ortonne JP, Ruzicka T, et al. Superiority of ivermectin 1% cream over metronidazole 0.75% cream in treating inflammatory lesions of rosacea: a randomised, investigator-blinded trial. *Br J Dermatol* 2015, 172: 1103-1110

Context

Rosacea is a relatively common chronic inflammatory skin disease affecting mainly adults,

predominantly women. There are few treatments with a good evidence base. Ivermectin is a macrocyclic derivative — an anti-parasitic with anti-inflammatory properties. This study sought to compare the efficacy of ivermectin 1% cream once daily with metronidazole 0.75% cream twice daily.

Methods

This was an investigator-blind, randomised, parallel group study. It was conducted over a 16-week period, which this paper reports on, with a further 36-week period following to investigate recurrence. Participants over 18 years of age were recruited by 64 centres in 10 European countries with moderate or severe papulopustular rosacea.

962 participants were randomised, 478 in the ivermectin arm and 484 in the metronidazole arm. Outcomes measured were a reduction in lesion count, Investigator's Global Assessment (IGA) and patient-reported outcomes (a 5-point global scale, satisfaction questionnaire and Dermatology Life Quality Index (DLQI)).

Key findings

93.8% participants completed the study. Baseline demographics were comparable in both arms of the study. At 16 weeks lesion count had reduced by 83.0% in the ivermectin arm and 73.7% in the metronidazole arm ($p < 0.001$). IGA was reported as clear or nearly clear with ivermectin 84.9% vs metronidazole 75.4% ($p < 0.001$). Patient-reported outcomes showed the global rating of excellent or good for ivermectin 76% and metronidazole 74.8%. Satisfaction ranked at 76% for ivermectin vs 61.3% for metronidazole and DLQI reduced by an average of 5.15 in the ivermectin arm, 3.93 in the metronidazole arm.

Adverse effects reported were mainly skin irritation at a rate of 0.6% for the ivermectin arm and 0.8% for the metronidazole arm. Three participants in the ivermectin arm discontinued treatment and 10 in the metronidazole arm.

Commentary

This study is useful as metronidazole has been one of the most used therapies in the UK to treat rosacea. This study demonstrates ivermectin as superior in all of the outcomes measured. A good safety profile was demonstrated and as it is for once-daily use it is easier to use than metronidazole.

There is not a number to define a large RCT⁷ but this is often taken as more than 500 participants. This study had nearly twice that number of participants and was multi-centred and multi-national indicating

validity and reliability of the results. Topical ivermectin is licenced in the UK as Soolantra[®] cream⁸.

Implications

This study identifies an evidence-based treatment option to discuss with patients. Phase 2 (continuing 36-week trial to look at recurrence) of the study is reported by Taieb et al⁹.

Third study

Citation

Batchelor JM, Tan W, Tour S, Yong A, Montgomery AA, Thomas KS. Validation of the vitiligo noticeability scale; a patient-reported outcome measure of vitiligo treatment success. *Br J Dermatol* 2016, 174: 386-394

Context

Vitiligo is a chronic skin disease causing depigmentation. A large number of RCTs have been undertaken and published assessing treatments for vitiligo but the lack of standard outcome measures ensures comparison of treatment effect is difficult. A measure frequently used is an estimation of $\geq 75\%$ repigmentation but there is no validation of this and patient-reported outcome measures are rarely used in vitiligo studies. This paper aims to validate a previously developed patient-reported outcome measure, the vitiligo noticeability scale (VNS), by asking whether the VNS is a better and more consistent indicator of treatment success than % repigmentation. The VNS is a score of 1-5 with 1 = more noticeable and 5 = no longer noticeable.

Methods

Patient participants were recruited via a mailing list, the Vitiligo Society and social media and dermatologists based in the UK who had previously expressed an interest. There were 101 patient responders and 33 clinicians. Pre- and post-treatment digitally manipulated images were used with participants responding online using the Survey Monkey tool. Respondents were asked to give a global assessment of treatment success and a VNS. Clinicians additionally were asked to identify % repigmentation.

Key findings

When comparing the VNS scores with global treatment success ratings, crude agreement was 78% for patients and 76% for clinicians. Crude agreement by clinicians comparing % repigmentation against global treatment success was 62%. 57% patients reported the VNS very easy or easy

to use, with just 7% saying it was difficult and none saying very difficult.

Commentary

In the absence of an easy-to-use and valid tool this study indicates the VNS has good construct validity (the degree to which scores of a given measurement instrument are consistent with hypotheses), is acceptable to patients to use and identifies good interpretability. Patients were central to the development of the VNS so this is not surprising. Additionally the VNS dealt with issues of hyperpigmentation, which the % repigmentation scale does not. The participants were self-selecting so may not be totally representative of the patient group as a whole.

Implications

This tool is free and easy to use, and could be utilised in a clinical setting. Crucially it is a patient-reported outcome measure. The VNS can be accessed at www.nottingham.ac.uk/research/groups/cebpd/projects/2vitiligo/vitiligo-outcome-measures.aspx and used with permission. Further validation is required with a larger cohort of participants and with a wider range of genuine (rather than digitally manipulated) pre- and post-treatment images. **DN**

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Rod Tucker, a pharmacist with a special interest in dermatology, answers more questions submitted by DN readers. If you have a burning question that you'd like to see answered in a future issue, please email it to susan.maguire@bdng.org.uk entitling your email: Ask the Pharmacist.

Q.

Which drugs used in dermatology have a 'narrow therapeutic index'?

A.

After ingestion drugs reach a peak level in the plasma and, as the drug is metabolised, levels fall over time, as shown in *Figure 1*. The therapeutic (or effective) plasma levels of a drug lie within a range of concentrations known as the therapeutic window and this represents the levels within which the drug provides efficacy without causing any adverse effects. As the drug is metabolised, the plasma concentration falls below the therapeutic window and no longer produces the desired effects. If the plasma drug concentration exceeds the therapeutic window, there is the possibility of adverse effects and toxicity.

The concept of the therapeutic index (TI) relates to the effective and toxic plasma levels of a drug. By definition, the TI is the ratio of the lethal dose of a drug for 50% of the population, divided by the minimum effective dose for 50% of the population¹. In practice, the TI represents the safety margin of a drug and ideally, the higher the ratio, the safer the drug. For example, a ratio

DRUGS WITH A NARROW THERAPEUTIC INDEX & SKIN WHITENING PRODUCTS

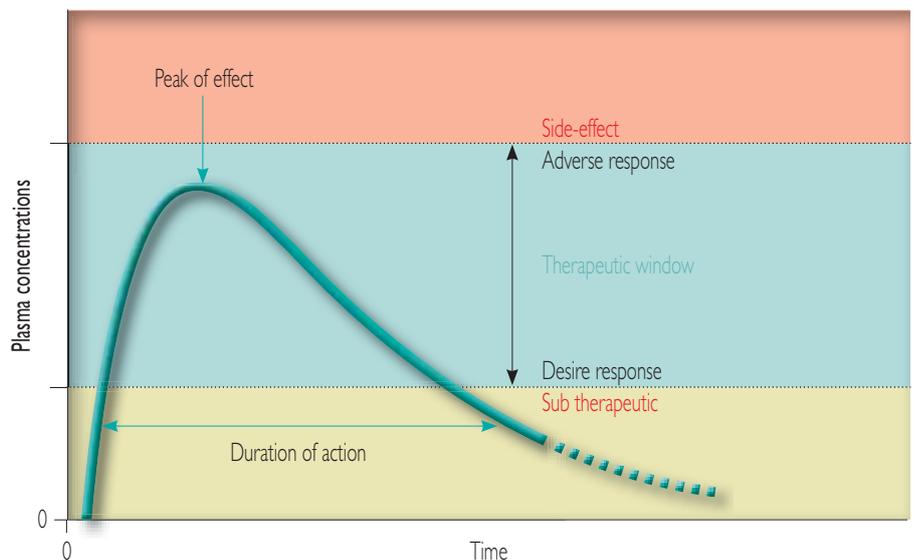


Figure 1. Illustration of the therapeutic window.

of 10 or more suggests a good safety profile for a drug. However, if the ratio is closer to 1, then the therapeutic window is contracted and there is a smaller difference between the effective and toxic dose. Drugs with a contracted therapeutic window are said to have a narrow therapeutic index (NTI).

BOX 1

Commonly used drugs with an NTI.

- ▶ Carbamazepine
- ▶ Digoxin
- ▶ Lithium
- ▶ Phenobarbitone
- ▶ Theophylline
- ▶ Phenytoin
- ▶ Warfarin

Clinical significance

The impact of an NTI is that small changes in the dose, which can occur because of interactions with other drugs or overdosing, can easily lead to adverse effects. There are a number of commonly used medicines that have an NTI as shown in *Box 1*.

Two drugs with an NTI that are commonly used in dermatology are:

- ▶▶ Ciclosporin
- ▶▶ Methotrexate

Many of the adverse effects of therapeutic failure of these drugs occur through drug interactions that can be either pharmacokinetic or pharmacodynamic. In the former case, the interaction affects either the absorption, distribution, metabolism or excretion of the drug. Pharmacodynamic drug interactions occur where the effects of one of

Table 1.

Examples of pharmacokinetic interactions with methotrexate and ciclosporin.

Drug	Interacting drugs	Effects
Methotrexate (MTX)	Oral retinoids	Reduced metabolism of MTX, leading to increased plasma levels and risk of hepatitis
	Non-steroidal anti-inflammatory drugs (NSAIDs)	Reduced excretion of MTX, leading to toxicity
	Penicillins	As above NSAIDs
Ciclosporin (CLP)	Calcium channel blockers	Reduced metabolism of CLP leading to increased plasma levels
	Digoxin	Increased levels and toxicity of digoxin
	Atorvastatin/simvastatin	Increased plasma levels of statins

(Adapted from Tey, et al²)

the drugs are changed due to the presence of a second drug at the site of action. For instance, both drugs might compete for the same receptor and ultimately antagonise or enhance the physiological effects of the first drug.

Pharmacokinetic interactions are more common and often involve the altered hepatic metabolism of the drug. In the liver, drugs are metabolised by the cytochrome P450 (CYP450) enzyme system, which comprises several isoenzymes (ie, slightly different forms of P450). Drugs can increase or decrease the activity of the different CYP450 isoenzymes. For example, if drug A enhances the activity of a CYP450 isoenzyme which metabolises drug B, then the metabolism of drug B is increased and may be cleared more quickly from the body. In contrast, if drug A inhibits the isoenzyme that metabolises drug B, then B will accumulate in the plasma. Clearly if co-administered drugs affect the metabolism of a drug with an NTI, the levels may decrease (reducing its effectiveness) or increase (leading to toxicity).

Some examples of pharmacokinetic interactions with methotrexate and ciclosporin are shown in Table 1.

Prescribers using NTI drugs need to be cognisant of the potential for interactions with other medicines since small fluctuations in the plasma levels of the NTI drug can lead to either toxicity or therapeutic failure. On a practical level, if the use of an interacting drug is unavoidable, then closer monitoring of the plasma concentration of the NTI drug is required and alterations of dosages might be necessary to optimise the therapeutic response.

Prescribers using NTI drugs need to be cognisant of the potential for interactions with other medicines since small fluctuations in the plasma levels of the NTI drug can lead to either toxicity or therapeutic failure.

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Q.

I look after patients with skin types 4-6 who are often very distressed by hyper-pigmentation, which may be due to melasma or a feature of eczema. Some of these patients ask whether skin-whitening products may be helpful. Do these products have a role in dermatological care and what advice should I give to patients?

A.

The sense that white is beautiful in Asian and African societies has a long history, as lightened skin has been associated with wealth and power. Indeed, a contributory factor to this notion of white supremacy has been the colonial legacy in Asian countries, in which the 'white' person is the ruler and the 'dark' or 'black' the worker¹. The desire for whitened skin was also prominent among aristocrats in England during the 17th and 18th century, who applied lead oxide powder to their faces to distinguish them from the workers². Though less obvious, the term 'blue blood' as applied to the aristocracy, relates to a preference for lighter skin, presumably so that the blue veins are highly visible.

Today, the use of skin-whitening products to lighten the whole complexion or to remove dark blemishes is common, as illustrated by three recent surveys. Skin-whitening agents were used by 60% of Malaysian students³, 33% of South African women⁴ and 74% of female Sudanese students⁵.

Skin-whitening agents

The most commonly used skin-whitening agent is hydroquinone (Table 1). The drug has often been found in illicit cosmetic products, though this use has been prohibited in the EU and many other countries for several years.

In order to understand how the various whitening agents work, it is necessary to briefly consider the process through which the body creates skin colour.

Table 1.
Common skin-whitening agents.

Skin-whitening agents	Mode of action
Hydroquinone Kojic acid Arbutin Aloesin Mercury Azelaic acid	Inhibition of tyrosinase
Ascorbic acid	Scavenging of ROS
Nicotinamide	Inhibition of melanosome transfer
Salicylic acid Tretinoin Alpha hydroxyl acids	Melanin dispersion and acceleration of keratinocyte turnover
Corticosteroids	Inhibition of α -MSH precursors, hence reducing stimulation of MC1R

The base layer of the epidermis contains a small number of cells called melanocytes, which produce the pigment melanin that is responsible for skin colour. Each melanocyte has dendritic projections, allowing each one to connect with between 30 and 40 keratinocytes. Within the cytoplasm of the melanocytes, specialised organelles called melanosomes produce melanin and these melanosomes are transported through the dendritic projections to shield keratinocytes from UV radiation. Interestingly, differences in skin colour among the races arise not because darker skin has more melanocytes, but from the distribution and number of melanosomes.

The process of melanogenesis (ie, stimulation of melanin synthesis) is instigated by the action of sunlight on the body, which produces reactive oxygen species (ROS). This causes the release of alpha-melanocyte stimulating hormone (α -MSH) from the pituitary gland, which then binds to the melanocortin-1 receptor (MC1R) on the surface of melanocyte cells and initiates the production of melanin. Within the

melanosomes, melanin is formed by conversion of the amino acid tyrosine under the influence of the enzyme tyrosinase. Skin-whitening agents cause hypopigmentation by affecting different stages in the production and distribution of melanin as shown in *Table 1*.

Medical management of hyperpigmentation

For many people hyperpigmentation of the skin is a source of embarrassment. There are many causes, including drugs (ie, oral contraceptives), photo-damage (manifesting as freckles and liver spots) and a cutaneous response to inflammation (commonly seen with acne, atopic eczema and psoriasis). Melasma is a hyperpigmentation disorder commonly seen in women, of unknown cause though recognised triggers include pregnancy, oral contraceptives and sunlight. There is a large body of data to support drugs

In recent years there has been a growth in the development of ‘cosmeceuticals’ — cosmetic products that provide additional health-related benefits.

such as hydroquinone and some of the other agents in *Table 1*. According to the Primary Care Dermatology Society, topical therapy with Pigmanorm[®] cream, which contains hydroquinone, tretinoin and hydrocortisone, is the most successful therapy, but is not available on the NHS⁶. There is some evidence so show that azelaic acid (20%) is also effective, but this is an unlicensed use in the UK.

Advice to patients

In recent years there has been a growth in the development of ‘cosmeceuticals’, which are essentially cosmetic products that provide additional health-related benefits, and a wide range of botanical compounds that have skin-whitening effects are incorporated into cosmeceuticals⁷. Unfortunately, there is a lack of clinical evidence to support the use of specific

products simply because efficacy data are not required for these products.

Nonetheless, there are a number of internet sites that advertise ‘natural’ skin-whitening products, which are also available from online retailers such as Amazon. Consequently, patients are likely to consider such products safe and effective and may well seek advice from nurses. In general, patients should be advised that prescription treatments are more likely to help than cosmetic products. If a skin-whitening agent is needed, patients should seek medical advice for an assessment of their condition and treatment options. Hyperpigmentation is difficult to treat and not everyone achieves clearance, and patients should practice year-round UV protection, which is a known trigger for melasma. In addition, sufferers should be advised that hyperpigmentation is slow to clear and can persist for many months. **DN**

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CIRCLE NOTTINGHAM DERMATOLOGY UNIT

Gill Godsell, Kate Blake

The dermatology unit at Circle's Nottingham NHS Treatment Centre has a long-established commitment to getting the best out of its nurses. Regular staff training and a readiness to try new ideas has led to the unit, now in its 8th year, becoming a highly effective service.

Meet the team

The nursing team consists of 21 trained nurses comprised of a lead nurse, 2 nurse consultants, 3 team leaders, 1 advanced nurse practitioner and 4 clinical nurse specialists. They are supported by 15 healthcare assistants and a large team of administrators, who play a key role in the smooth running of the department. We are part of a team that also includes 7 consultant dermatologists, 2 trainee dermatologists and one Mohs clinical fellow.

All of our nurses recognise that they are members of a multi-skilled team. A unit that contains such a wide variety of skills allows CircleNottingham to provide a comprehensive range of dermatology treatments, in which our nurses take a number of leading roles. The department has developed team leader posts in the outpatient clinic, skin surgery unit and phototherapy department, with a senior healthcare assistant supporting each team leader. One of our advanced nurse practitioners undertakes skin surgery to remove skin lesions, and we are currently developing a nurse-led leg ulcer service.

Our nurses also recognise the good that can be done in communities. We are developing community clinics to provide care closer to the home and have already developed a community



Members of the CircleNottingham dermatology team.

surgery service run by our accredited GP with an extended role in skin surgery and skin cancer. This service means that we can provide treatment and surgery closer to home, at great convenience to the patient.

Staff education

The dermatology department is fully committed to the education of its staff. We have successfully supported nurses to complete Masters and First Level degrees as well as the non-medical prescribing course, Advanced Life Support course and numerous other specialist courses and study days. The department currently has 5 practitioners trained in non-clinical prescribing, with a further two due to complete their training this year. Additionally to this, we have a nurse who undertakes patch-test reading with the support of our skin allergy specialist, Dr John English.

To maintain high quality standards, regular training is essential. To ensure that both the needs of the patient and national requirements are met, we provide monthly educational sessions on a designated subject. The last three sessions have covered topics such as acne,

alopecia and skin cancer. These sessions are designed to continue the professional development of our staff.

This commitment to training has meant that the dermatology unit has two nurse consultants able to see new patients; one who sees new acne patients, and a second who sees referrals with suspected BCC. Nurses who see new patients must be highly qualified before being signed off as competent by a consultant and as our consultant nurses are highly trained they are able to incorporate diagnosis into their role.

Good relationships

Our nursing unit prides itself on the relationship shared between nurses, consultants and managers. It is a relationship that permeates every aspect of the unit. In the pursuit of providing the best possible care for the patient, nurses are encouraged and trusted by managers to take ownership of their roles. All staff are actively encouraged to speak up if they see something they believe could be improved. This reinforces the feeling of staff being partners within the company.

We are extremely excited to see what the coming years have for the CircleNottingham dermatology service. We have been exploring new avenues of dermatology, such as telemedicine, in an effort to treat our patients in ever more effective ways. The initial results of this experiment look promising, and we will continue to explore new pathways in the pursuit of good patient care.

We have come far and faced down some tough issues, but the nursing team has stayed true and come out the other side stronger than ever. We hope to see our unit expand further as we take on more skilled staff to complement our pre-existing team. **DN**

Gillian Godsell OBE is a Skin Cancer Nurse Consultant, and Kate Blake is Lead Dermatology Nurse at CircleNottingham

STAYING POSITIVE WITH SCLERODERMA

Diane Unsworth

Diane Unsworth, 55, from Cheshire is a Volunteer Co-Ordinator at her local community centre in Newton-Le-Willows. Diane explains how she coped with being diagnosed with systemic sclerosis, also known as scleroderma; the additional complications this autoimmune condition creates, and how she remains positive throughout her journey.



Art lover Diane has sold some of her paintings to raise money for the St Helens rheumatology department.

Puffy hands

I have always enjoyed art, since being introduced to it at school. I had a dry spell where I didn't draw or paint but it was when my hands became affected that I decided I needed another focus in life and picked up the brush again.

Some of my first symptoms were puffy hands with very tight, shiny skin that was incredibly itchy, then the skin all over my body started to go hard; in fact it went so hard the needle actually bent once when I was having an injection in my tummy.

That's what scleroderma does to you — it's when your body over-produces collagen and creates fibrosis in the skin and connective tissue.

I was diagnosed with Diffuse Systemic Scleroderma with lung fibrosis on June 29, 2012. Ironically World Scleroderma Day! Within a few weeks I found myself in intensive care at Whiston Hospital having a renal crisis before being transferred to HDU at Liverpool with kidney failure.

The first weeks of tests, then diagnosis, were the worst of my life. My mum — for whom I had been a 24/7 carer before being taken ill and placed in hospital — was admitted to hospital herself.

My mum passed away during my first week of dialysis. If it were not for the support of the renal nurses, friends and family, I am not sure how or even if I would have been able to get through that period. I am still so thankful for the support that I have received with both my personal life and my health.

I was very lucky with my treatment. Firstly my GP had an idea of what it was when she saw my hands (she had seen a case 30 years ago when training) and did an urgent referral, then I received amazing treatment from the rheumatology department at St Helens Hospital and the Royal Liverpool renal unit.

Finding out more

When things had calmed down a bit, I wanted to know more. I first discovered Scleroderma & Raynaud's UK (SRUK) by searching Google. I found the website and information to be really good and I bought the books, *Scleroderma — The Inside Story* and *Raynaud's — Your Questions Answered*, both by Anne Mawdsley MBE. I then got in touch with the local contact for Merseyside and arranged to meet up. It was great to meet someone with the same condition and I will always remember that the first thing we did was compare hands!

Raynaud's has affected me more as the condition has progressed and I've been



Diane's hands during a Raynaud's attack.

diagnosed with Secondary Raynaud's. I'm never far away from my warm, comfortable boots and I keep several pairs of gloves in stock in order to stay warm. My moisturising regime has helped improve my skin. I have used a number of dermatological creams and gels over the years and my daily regime seems to have paid off; my skin has softened and I can now use a much lighter moisturising cream. My friend Jan helps put cream on my back as my limited hand function won't let me reach all areas of my body.

After becoming a member of SRUK, I attended my first conference in Chester.



Friend Jan helps moisturise the areas Diane cannot reach due to her limited hand function.

Meeting up with people with the same condition was really good and the guest speakers gave a detailed presentation on different aspects of the condition.

As my condition stabilised a little, I wanted to get more involved and put my experiences of the condition to good use. Firstly I became a member of the patient reference group in the rheumatology department at St Helens Hospital, as they have been (and still are) amazing, and I also became a local contact with SRUK. Both of these involvements give me the opportunity to spread awareness of the condition and some of its related challenges. I have met so many new friends, it's lovely.

More recently I have started to involve myself in fundraising. I held a stall at a local craft fair and sold some of my own paintings to raise money for the rheumatology department at St Helens Hospital (£250). My next paintings will raise money for the Liverpool renal unit and SRUK.

Employment challenges

Today I work as a Volunteer Recruitment Co-ordinator at a local community centre. I meet all sorts of interesting people who volunteer to help run the centre. People volunteer for all sorts of reasons — to gain experience in another area for a career change or to give something back to the community, and many of the people I meet have a chronic illness or disability. They find it very hard to gain a place in the workplace but still have so much to offer.



Janet, who is also a member of the support group, drives Diane to the station for her appointments.

I can relate to this; as a result of so many hospital and clinic appointments and perhaps being off sick more than other employees, it can be difficult to work in the same way that you once did but my employers have been so accommodating. When I was first diagnosed I was off work for 9 months and on my return they changed my role. I had also previously worked with the children's club, planning activities and co-ordinating the volunteers, and as I was on peritoneal dialysis and immunosuppressant therapy the risk of working with up to 100 children was too great, so I was allowed to swap from that to dealing solely with volunteers. On my bad days my employers allow me to work at home on the administration side of things. I have, however, recently reduced my hours and trained up one of my colleagues to job share.

Continuing care and improvement

Since receiving treatment, my lung fibrosis has reversed and there was no evidence of established fibrosis on my last scan, so the

treatment and care I am receiving must be working. My kidneys have kicked back into life (about 28/30%) and I am no longer on dialysis thanks to the care of the Liverpool renal team. I continue to receive treatment at the rheumatology department at St Helens Hospital for scleroderma, attend the Royal Liverpool for my renal involvement and Whiston Hospital for my cardio involvement.

I am fortunate to receive fabulous care and treatments from the same consultants and teams who know me and my condition, as well as a lot of support from my family and friends. I know others are not so lucky. One thing that I have become aware of since being involved with scleroderma is the lack of consistency in diagnosis and treatment. For the future of scleroderma, I would wish not only for a cure, which I truly believe will not be far off, but also for attention to be directed at creating greater education and awareness of the condition among those who we, as patients, see first, such as GPs. If GPs were to receive education regarding the red flags of the condition, there is more chance of prompt referrals, which can have a real impact on the outcome of treatment and the condition itself.

Despite the challenges, I am determined to stay positive. I want to help others with scleroderma and Raynaud's through the SRUK support group and through any research that I would be suitable for and could partake in. My attitude is to just get on with it, have a go and accept that you have to adapt to changes in life. **DN**



■ Scleroderma & Raynaud's UK (SRUK) is the only charity dedicated to improving the lives of people affected by Scleroderma and Raynaud's. We exist to improve awareness and understanding of these conditions, to support those affected and, ultimately, to find a cure. To sign up and receive our newsletter, find out more information about the conditions and our work as a charity, please visit www.sruk.co.uk, like us on Facebook, (/WeAreSRUK) follow us on twitter (@WeAreSRUK) or contact one of our team on **01270 872776**.

NEWS FROM THE SUB-GROUPS

Non-Medical Prescribing

By Kathy Radley, Chair

Several members of the non-medical prescribing sub-group committee will be at Conference so do look out for us and say hello. Please also look at our poster on prescribing issues and acitretin.

The long-awaited updated guidelines on methotrexate are undergoing final review and should be published soon via the BAD website.

The non-medical prescribing sub-group study day will be in Manchester on Tuesday 22 November 2016, which gives plenty of time to negotiate leave and cancel clinics. The sub-group has an exciting programme planned, including the prescribing and monitoring of mycophenolate mofetil, topical treatments for actinic keratoses and avoiding prescription errors. If you have suggestions for this or future study days please contact the committee via Susan (susan.maguire@bdng.org.uk) or catch me at Conference. For further details see the BDNG website.

Contact Dermatitis

By Andrea Cooper, Chair

I'd just like to let members know that the contact dermatitis sub-group will be holding a workshop session on 21 June 2016, at the BDNG conference in Bournemouth. The 30-minute session will include the preparation and application of patch tests for nurses new to this area of dermatology.

Aesthetic Dermatology

By Isabel Lavers, Chair

The BDNG has created a new sub-group devoted to aesthetic dermatology. The group is open to all nurses with an interest in dermatology and aesthetics. I would like to encourage nurses to join the group, raise awareness for aesthetic dermatology and reduce some of the misconceptions that surround aesthetics. The group's agenda is not limited to toxins, peels and dermal fillers, but is inclusive in particular of treatments that are deemed cosmetic by the NHS but

can have far-reaching psychological impact on the patient. These include, for example, hair removal for females with or without PCOS, patients with thread veins on the face and legs, acne, rosacea, etc. The importance of restoring self-confidence through aesthetic treatments such as dermal filler for facial irregularities should not be underestimated. Dermatology nurses are particularly well placed to combine dermatology and aesthetics and more of us are venturing into this field. By joining the new group you will be able to share best practice, talk about the business side of setting-up in aesthetics, recognise the areas in dermatology that lend themselves well to aesthetic treatment, and discuss regulation (or the lack of it) and help each other deliver safe services for our patients/clients.

Turn to page 61 for Isabel's account of the recent *Cosmetic Dermatology Evidence-Based Update meeting held in Nottingham*. **DN**

PSORIATIC ARTHRITIS AND PSORIASIS — PATIENT MANAGEMENT FOR NURSES

This was the title of a well-programmed study day aimed at both dermatology and rheumatology Clinical Nurse Specialists (CNS) and held at the end of February in Dundee. Celgene (the makers of OtezlaR (apremilast), a PDE, cell modulator and relatively new kid on the block) sponsored this very worthwhile afternoon with experienced speakers from across the country.

Dr Helen Harris, a renowned consultant rheumatologist in Fife, spoke regarding the Clinical Assessment of Disease Activity in Psoriatic Arthritis (PsA) and Psoriasis. The examination of the patient was described with specific attention paid to the Psoriasis Area Severity Index (PASI), the body surface area (BSA) of the psoriasis, enthesitis, dactylitis, nail involvement and a joint count. When the PASI and BSA were highlighted, one could see the rheumatology nurse specialists in the room
Fiona Lovegrove is a Rheumatology Nurse Practitioner at Fife Rheumatic Diseases Unit

perk up with special attention and similarly the dermatology nurses on explanation of enthesitis, dactylitis and joint counts!

Julia Witz, a consultant rheumatology CNS from East Kent, joined the delegates and participants via WebEx on the screen. Julia has a lot of hands-on knowledge regarding treating PsA patients with many different therapies and now apremilast. Apremilast has shown very good results overall for PsA and psoriasis but there have been some queries over possible gastrointestinal problems that may occur. Julia described a few different cases of hers, indicating how she "nursed" various patients through the initial periods of nausea/diarrhoea until they got through these and continued on their medication with the desired beneficial effects.

Finally, Barbara Page MBE, well known to many dermatology and rheumatology nurse specialists in the country, closed the session with a thought-provoking talk, reminding us of the

holistic care of the patient and explaining how to carry out a psychosocial assessment during the nurse consultation. There was a reminder of how important the patient is and how the "doctors should get down from their pedestals and the patients up from their knees"! Various outcome tools were explained to measure patients' levels of distress, and issues preventing them from carrying out their normal day-to-day work and leisure activities.

The study day proved how useful it would be to continue more work with rheumatology and dermatology CNSs together. There would be a lot of interaction and learning from one another. Our patients with PsA need to see both the rheumatology CNS and the dermatology CNS. This makes these two groups of nurses interdependent. Perhaps, in the not too distant future, such a group will be formed, allowing for knowledge to pass from one group to another; and it will be our patients who receive the most benefit. **DN**

LIFE'S AN ITCH... INTRODUCING THE ITCH DISCUSSION TOOL

Recent research reveals the extent to which itch, often an underrated symptom of psoriasis, affects the lives of those with the condition, with 95% of those surveyed saying their psoriasis itches.

Given its impact, though, conversations around itch in psoriasis aren't routinely happening:

- ▶ 43% of people with psoriasis surveyed don't talk to their doctor or nurse about itch, with 72% saying they find it difficult to describe how much itch impacts their lives!
- ▶ Moreover, just under a quarter (24%) of healthcare professionals surveyed do not proactively ask patients about itch in consultations, in spite of 95% believing it is an important conversation to have.²

Itch discussion tool now launched to help improve conversations about itch in psoriasis

In response to these findings, the BDNG, the Psoriasis Association and Celgene have launched the 'Itch Discussion Tool', which is available to download now at the BDNG website: www.bdng.org.uk/resources/bdng-resources

The tool is part of the wider Life's an Itch campaign, inspired by previous research by Celgene showing a significant disparity between patients' and healthcare professionals' perceptions of itch as a major factor of disease severity.^{3,4}

The tool comprises an itch impact questionnaire and an action plan. People with psoriasis can either complete the itch impact questionnaire before or during consultations, and then create the action plan together with their healthcare professional.

The tool is currently being piloted in selected dermatology clinics in the UK. Copies of the tool will be available for you to pick up at the BDNG annual conference.

Introducing...Itch Art!

As part of Life's an Itch, people with psoriasis were asked to submit words they use to



Itch art: illustration by Brighton-based artist Vicky Scott.

A number of artists were commissioned to create bespoke 'itch art' inspired by the words of those with psoriasis. The Itch Gallery will be at the BDNG Conference.

describe itch. Over 1,600 words were submitted, generating a word cloud of the language most commonly associated with itch in psoriasis.

A number of artists, representing different genres, were commissioned to create bespoke 'itch art' inspired by the words of those with psoriasis. The Itch Gallery will be at the BDNG annual conference and other psoriasis-related meetings during 2016 to help promote the Itch Discussion Tool, so do take a look!

'Life's an Itch' is a collaboration between Celgene and the Psoriasis Association, supported by the BDNG, fully funded by Celgene.



Sculpture by Cumbria-based artist Michelle Castles.

To see the Itch Gallery and to pick up copies of the Itch Discussion Tool, visit the Tregonwell Hall site at the BDNG annual conference. [DN](#)

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UK DCTN: UPDATE ON ACTIVITIES



Carron Layfield is the UK DCTN Network Manager at the UK DCTN Co-ordinating Centre, Centre of Evidence Based Dermatology, Nottingham. Email carron.layfield@nottingham.ac.uk

Update — ongoing studies

HI-LIGHT — 50% recruitment target reached

Hi-Light is a National Institute for Health Research Health Technology Assessment Programme (NIHR HTA) funded randomised controlled trial (RCT) assessing hand-held narrowband UV devices, both alone and in combination with topical steroid, for the treatment of early focal vitiligo. The trial is aiming to recruit 440 participants, aged 5 years and above, with limited non-segmental vitiligo affecting less than 10% of body surface area. Patients are being recruited from 16 secondary care centres across the UK. So far over 220 patients have been recruited. www.vitiligostudy.org.uk

BEEP — over 1,000 babies now recruited

The BEEP trial is an NIHR-funded RCT to investigate whether applying emollients for the first year of life can prevent eczema in a high-risk population (family history of hay fever, eczema or asthma). To date over 1,000 newborn babies have been recruited into the study (against a target of 1282) from 16 primary and secondary care centres. The primary outcome for the study is the proportion of infants with an assessor-blinded diagnosis of eczema when the child is 2 years old — a skin prick allergy test will also be conducted at this time. The children will then be followed-up until their 5th birthday to look at longer-term effects of the intervention. www.beepstudy.org

ALPHA — more recruiting centres needed

The NIHR HTA-funded ALPHA study is investigating the efficacy of two standard treatments for severe hand eczema. Patients with severe chronic hand eczema unresponsive to treatment with potent topical corticosteroids are randomised to receive either once-a-day tablet

treatment (alitretinoin) or twice-weekly PUVA therapy and are followed-up for one year. The study now has 21 sites open to recruitment but with a target of 500-780 participants over 2 years the co-ordinating team are keen to hear from anyone who would like to take part. Promotional material is available for display in patient waiting areas (including a patient information video with details about the study) and trial updates can be followed on twitter at @LICTR_Alpha. For further information please contact the study team at ctr-alpha@leeds.ac.uk

APRICOT — searching for potential participants with palmoplantar pustulosis

The APRICOT trial, a double-blind RCT investigating the efficacy of anakinra versus placebo for patients with palmoplantar pustulosis, is now looking for potential participants. We have permission for participant self-referral via the trial website www.apricot-trial.com and need some assistance in spreading the word about this EME (Efficacy and Mechanism Evaluation Programme) funded study. Initially the four recruiting centres will be Guy's Hospital (London), Salford Royal Infirmary (Manchester), Royal Victoria Infirmary (Newcastle) and University Hospital of Wales (Cardiff). As palmoplantar pustulosis is such a rare disease these centres will take referrals from their local regions. Please contact the trial manager rosemary.wilson@gstt.nhs.uk for more information.

TREAT — new study on severe paediatric eczema in set-up

TREAT is a multi-centre RCT assessing the effectiveness, safety and cost-effectiveness of methotrexate versus ciclosporin in the treatment of severe atopic eczema in children. EME-funded, the trial aims to recruit 102 patients aged 2-16 years who require systemic treatment. Participants will be allocated to receive either methotrexate or ciclosporin for 9 months and then followed-up for another 6 months to assess short- and long-term effectiveness and the safety profile of both drugs. TREAT will also address how the two medicines reduce skin inflammation and itch, which is an important gap in current knowledge.

Can you help identify patients for TREAT?

Recruitment for this study has begun and the trial team is looking for children aged 2-16 with severe eczema that has failed to respond to standard topical treatments, including regular use of potent topical corticosteroids. Even if you're not one of the 14 participating sites, you can refer eligible families to the nearest centre. Please email the trial team at Treat.Trial@liverpool.ac.uk or; if you live in or around London, email Charlotte Walker, Lead Nurse, at Charlotte.Walker@gstt.ac.uk

UK DCTN activities at the BDNG Conference

The results from the CLOTHES study (an RCT of silk therapeutic clothing to assess the effectiveness and cost-effectiveness of silk therapeutic clothing for the long-term management of moderate/severe eczema in children) will be presented by Dr Fiona Cowdell during the Scientific Session (Tues 21 June) along with a poster focusing on the study's qualitative work. We will also be manning a UK DCTN stand in the exhibition area and would love to see you there.



for the UK DCTN Nursing Prize

The award is for a two-year period and the prize of £1500 covers expenses for a number of activities. These include spending 2-3 days at the UK DCTN Co-ordinating Centre in Nottingham to gain experience in the conduct and management of clinical trials and how they are developed, working on critical appraisal skills with Prof Hywel Williams (Chair of the UK DCTN) and joining the UK DCTN Steering Committee. For more information see <http://www.ukdctn.org/ukdctn/awards-and-training/index.aspx>.

To be eligible for this award you need to be a UK-based nurse involved in recruiting into dermatology clinical trials — you do not need to be solely working in a research environment to apply. The closing date for applications is Friday 28 October 2016 and all applications and informal enquiries should be made to Carron Layfield (contact details as above). **DN**

“IS COSMETIC DERMATOLOGY PROPER DERMATOLOGY?”

This was the question posed by Professor Hywel Williams in the opening session of *Cosmetic Dermatology: An Evidence Based Update*, which was held on 12 May at the NCTL Learning & Conference Centre in Nottingham. Isabel Lavers attended the event and in this article provides a summary of the wide-ranging topics presented by speakers from around the world.

Evidence-based dermatology ensures that treatments are clinically oriented, practically focused as well as entirely patient-focused, and fully supported by the very latest medical evidence. Emphasis is on use of the highest quality evidence available when treating people in the field of dermatology.

Professor Hywel Williams from the UK Dermatology Clinical Trials Network (UK DCTN) and Sean Lanigan from the British Cosmetic Dermatology Group introduced this year's evidence update. 125 national and international delegates attended this excellent event on cosmetic dermatology. Prof Williams opened the session with the question: Is cosmetic dermatology proper dermatology? For example, would we regard the treatment of acne scarring as proper dermatology or cosmetic?

This year's update provided comprehensive coverage of cosmetic dermatology, including topics on acne scarring, melasma, hirsutism, Botulinum toxin A and skin of colour. World-leading experts in the field of dermatology presented and provided expert guidance on cosmetic dermatology, as well as discussing common dilemmas that clinicians face when considering the best approach to patient management. A lively lunchtime panel session with questions collected prior to the event provided ample opportunity to ask specific questions and share best practice.

Isabel Lavers is a Dermatology Nurse Specialist, Salford Royal Hospital, and Owner, loveSkin Aesthetics, Dermatology and Medical Laser Clinic, Bury

Table 1.

Risk factors: Acne severity and time elapsed between acne onset and first effective treatment.
(Dréno B, et al. Poster presented at 23rd EADV Congress, Amsterdam, The Netherlands, 8-12 October 2014, P024.)

Country	Frequency of scars in active acne patients	Scar frequency according to acne severity on face		
		Almost clear/mild	Moderate	Severe/very severe
France	37%	22%	48%	79%
Brazil	44%	30%	55%	74%
USA	43%	28%	51%	77%

To follow are summaries of each of the sessions.

Cochrane Library — Systematic review on the treatment of acne scarring

Alison Layton, Harrogate

Acne scarring is a frequent complication of acne and resulting scars may negatively impact on an affected person's psychosocial and physical wellbeing. Although a wide range of interventions has been proposed, there is a lack of high-quality evidence on treatments for acne scars to better inform patients and their healthcare providers about the most effective and safe methods of managing this condition. This Cochrane review aimed to examine treatments for atrophic and hypertrophic acne scars, but predominantly facial atrophic scarring.

The Cochrane Skin Group searched a number of databases up to November 2015, trials registers and randomised controlled trials.

Main results

24 trials with 789 adult participants aged 18 years or older were included.

Primary outcomes looked at were participant-reported scar improvement and any adverse effects serious enough to cause participants to withdraw from the study.

Participant-reported scar improvement

- ▶ In one study fractional laser was more effective in producing scar improvement than non-fractional non-ablative laser at week 24
- ▶ Fractional laser showed comparable scar improvement to fractional radio frequency in one study at week 8 and was comparable to combined chemical peeling with skin needling in a different study at week 48
- ▶ In a further study chemical peeling showed comparable scar improvement to combined chemical peeling with skin needling at week 32
- ▶ Chemical peeling in one study showed comparable scar improvement to skin needling at week 4
- ▶ In another study, injectable fillers provided better scar improvement compared to placebo at week 24.

Serious adverse effects

- ▶ In one study chemical peeling was not tolerable in 7/43 (16%) participants

Secondary outcomes looked at were participant-reported short-term adverse events and Investigator-assessed short-term adverse events.

Participant-reported short-term adverse events

- ▶ All participants reported pain in the following studies: comparing fractional laser to non-fractional non-ablative laser; comparing fractional laser to combined peeling plus needling; comparing chemical peeling plus needling to chemical peeling; comparing chemical peeling to skin needling and comparing injectable filler and placebo.

Investigator-assessed short-term adverse events

- ▶ Fractional laser was associated with a reduced risk of hyperpigmentation than non-fractional non-ablative laser
- ▶ Chemical peeling was associated with increased risk of hyperpigmentation compared to skin needling
- ▶ No difference in the reported adverse events with injectable filler compared to placebo.

Authors' conclusions on clinical benefits

- ▶ No studies included the back
- ▶ Nothing to confirm short-term benefit will translate to long-term effects
- ▶ Moderate quality evidence for dermal fillers
- ▶ No high-quality evidence to advocate any treatment for first-line use in the management of acne scars.

Authors' conclusions on quality of evidence

- ▶ Lack of good-quality evidence of different interventions due to:
 - ▶ Poor methodology
 - ▶ Underpowered studies
 - ▶ Lack of standardised assessments of improvement
 - ▶ Confounding factors such as acne and scar duration and skin phototype
 - ▶ Lack of studies that establish efficacy of treatments compared to placebo or sham
- ▶ Comparator studies of active treatments suggest no difference
- ▶ In the absence of studies that

establish efficacy compared to placebo or sham interventions, this finding of no evidence of difference between two active treatments could mean that neither work.

Although the aim of the review was to identify important gaps for further primary research, it might be that placebo and/or sham trials are needed to establish whether any of the active treatments produce meaningful patient benefits over the long term.

Source: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011946.pub2/epdf/abstract>

Further reading

- ▶ Centre of Evidence Based Dermatology www.nottingham.ac.uk/research/groups/cebd/resources/acne-systematic-reviews.aspx
- ▶ Zaenglein AL, Pathy AL, Schlosser BJ, et al. Guidelines of care for the management of acne vulgaris. *J Am Acad Dermatol* 2016, Feb 15. www.aad.org/practice-tools/quality-care/clinical-guidelines/acne

Skin camouflage — does it still have a role in 2016?

Elizabeth Allen, BASC

Skin camouflage provides a quick, non-invasive solution to reduce the visual impact of non-infectious skin conditions, healed scars and tattoos. It was developed during World War II. Today crèmes and powders are available, which are specially formulated and highly pigmented to achieve adequate coverage for between 8-16 hours.

Key messages

- ▶ BACN is the British Association of Skin Camouflage
- ▶ BASC is a patient support group that was founded and run by people who do not necessarily wear skin camouflage
- ▶ In an ideal world there would be no need for skin camouflage...we do need to challenge society's very narrow perception of 'beauty'
- ▶ Psychological impact of skin disease is not directly related to the overall area affected or to the objective severity of the condition [source: *The*

Psychological & Social Impact of Skin Diseases on People's Lives, updated 2013 edition (April 2013). A Report of the APPGS]

- ▶ People may experience a sense of loss and disappointment when it becomes apparent that there is no medical or surgical solution available
- ▶ Scarring; camouflage does not alter the texture of the skin but it just makes appearance texture/discoloration less noticeable and the immediate visual effect does help the person to regain confidence
- ▶ Range of companies available. There is no best brand, as each brand offers different properties (thicker; more fluid, etc) to meet the specific need of the area to be covered.

Camouflage products can be obtained via NHS prescription, over the counter or via online mail ordering.

Take home message: visible difference

Professor Nichola Rumsey, Co-Director of the Centre for Appearance Research in Bristol, says: "Language is so powerful that we need to look at how it is used when talking about disfigurement. Here at the Centre, we talk of 'visible difference', which is a neutral term I would like to see used by everyone".

Incobotulinumtoxin A for Upper Facial Lines
Berthold Rzany, Germany**Level of evidence on this topic**

There is ample evidence available, as all toxins are drugs and drugs require clinical controlled trials.

Three different toxins in Europe and the US

- ▶ Abo — BoNT-A (Dysport®/Azzalure®)
- ▶ Inco — BoNT-A (Xeomin®/Bocouture®)
- ▶ Ona — BoNT-A (Botox®/Vistabel®)

The 3 toxins are different, but they behave similarly when injected. Botulinum toxin A specifically prevents neurosecretory vesicles from docking/fusing with the nerve synapse plasma membrane and releasing their neurotransmitters to the adjacent muscle fibres. The decrease of muscular activity and sweating around 2 injection

points and the area of the field of effect is influenced by the:

- ▶ Units injected
- ▶ Muscles' size and activity*
(*Respectively the activity of the sweat glands)

They are studied and licensed for differing licensed indication. So far most clinical trials have been focusing on the glabella area only, however BoNT-A is used all over the face and neck.

Dr Berthold Rzany reported on the first published trial on three facial areas (glabella, forehead line and crow's feet). The outcome was that the efficacy was good for all indications — but a bit weaker for the crow's feet. His key point on the challenge of this trial was the very high proportion of screening failures. The study inclusion required patients to report a significant psychological impact. Most patients failed the questionnaire for significant psychological impact. Why was this question used? Because of regulatory reasons — the inability of the German BfArM to accept that botulinum toxin is used beyond a clear disease definition.

Results

Incobotulinumtoxin A proved to be efficacious and safe when treating three adjacent facial areas at the same time. However at day 30 it became clear that the areas differ in their efficacy. The highest efficacy was seen in the glabella area followed by the forehead and crow's feet.

Summary

The study outcome is less comparable to other studies and more expensive due to the high number of unnecessary screening failures. This trial adds important evidence to the most commonly treated areas with BoNT-A. However, it also demonstrates that for several reasons (study design, anatomy) efficacy varies between the different areas.

Interventions for melasma

Ratna Rajaratnam, Singapore

Dr Rajaratnam's talk outlined the epidemiology, causes and risk factors for melasma, as well as review evidence

from the Cochrane systematic review on interventions for melasma with an update on trials focusing on preventing melasma relapses.

Melasma is an acquired disorder of hyperpigmentation occurring on the face and predominantly affecting women of childbearing age. It is a chronic, often relapsing condition with a negative impact on quality of life.

Melasma is divided into three types: epidermal, dermal and mixed melasma. Epidermal melasma is the most superficial with an increase in the skin pigment (melanin) in the top layer of skin (epidermis). In dermal melasma, there is increased skin pigment in the second deeper layer of the skin (the dermis). Mixed melasma is a combination of epidermal and dermal melasma. It may be important to distinguish between different categories of melasma as it has been suggested that dermal-type melasma may be less responsive to conventional therapy.

The presentation given by Dr Rajaratnam summarised an evidence-based review of interventions available for the treatment of melasma/hyperpigmentation.

Key messages

- ▶ Easy to spot but difficult to treat
- ▶ Can take many months to subside
- ▶ Of those affected about 90% are female
- ▶ Most common in Fitzpatrick skin types III & IV
- ▶ Caused by UV light, genetic, hormonal link to pregnancy and oral contraceptive pill, thyroid disorders, stress.

Diagnosis

- ▶ Sun-exposed areas, such as the cheekbones, forehead and chin. It may occasionally affect other areas such as the neck and forearms
- ▶ Use of dermatoscope to determine type. Very dark = epidermal and blue = dermal
- ▶ Common after pregnancy and medication containing hormones
- ▶ Familial predisposition for the development of melasma.

Treatments

- ▶ Be aware of the causes and avoid
- ▶ Triple-combination (TC) cream was significantly more effective at lightening melasma than hydroquinone 4% alone or when compared to the dual combinations of tretinoin 0.1% and hydroquinone, tretinoin and fluocinolone acetonide, or hydroquinone and fluocinolone acetonide
- ▶ TC showed side-effects of redness and peeling in 63% of patients
- ▶ When using hydroquinone 4%, always use in combination with a sunscreen. Onset of action with hydroquinone is at around week 3. Sunscreen is used to prevent re-pigmentation
- ▶ Combining hydroquinone with glycolic peels did not achieve a better outcome than hydroquinone alone, but in combination with 4 x Intense Pulsed Light the outcome was better
- ▶ Azelaic acid (20%) was significantly more effective than 2% hydroquinone at lightening melasma but not when compared to 4% hydroquinone. Azelaic acid is a good alternative to hydroquinone but patients experienced more erythema and irritation
- ▶ The adverse events most commonly reported were mild and transient such as skin irritation, itching, burning, and stinging
- ▶ Hydroquinone 2% is less effective than 4%.

New trials showed that application of TC twice a week and a daily SPF60 was useful at preventing recurrence. It was further mentioned that sunscreen should also contain visible light protection in addition to UVA/UVB protection.

Cosmetic dermatology in skin of colour

Sharon Aryiku, Nottingham

Launch of the CEBD Skin of Colour Resource

The Centre of Evidence Based Dermatology (CEBD) announced its new, online CEBD Skin of Colour Resource. The purpose of the Skin of Colour Resource is to provide healthcare professionals with regularly

updated, comprehensive evidence-based information on skin of colour in the form of systematic reviews, review articles, guidelines and patient information leaflets. Recommendations for relevant textbooks and websites are also included. The Skin of Colour Resource covers a wide-ranging list of disorders that are unique, prevalent or clinically variable in pigmented skin. Vitiligo has not been included, as although it is clinically striking in skin of colour, it has no racial predilection and is already very well covered in current literature. It appears that this is the first comprehensive online resource of this type. The CEBD Skin of Colour Resource is compiled by Dr Douglas Grindlay (Information Specialist) and Dr Sharon Aryiku (Clinical Lead).

With cosmetic procedures becoming more and more popular in skin of colour, procedure-related complications are also increasing. Thus research and a useful resource are needed to fill existing knowledge gaps.

Find it at this link: www.nottingham.ac.uk/research/groups/cebd/resources/skin-of-colour/index.aspx

Interventions for hirsutism

Esther van Zuuren, Leiden, Netherlands

Esther van Zuuren gave a very well received talk on interventions for hirsutism, focusing on hirsutism in clinical practice, including diagnosis, causes and the results on how to treat, published in the Cochrane review in 2015.

Hirsutism occurs in 5%-10% of women of reproductive age when there is excessive terminal hair growth in androgen-sensitive areas (male pattern). It is a distressing disorder with a major impact on quality of life. The most common cause is polycystic ovarian syndrome.

Key messages

- ▶ Oral contraceptive pills (OCPs) reduced the amount of hairs, but the reduction was not consistent across the studies, although two OCPs (ethinyl estradiol 35 µg + cyproterone acetate 2mg compared to ethinyl estradiol 30 µg +

desogestrel 0.15mg) appeared to be effective in a way that can be considered important for women with hirsutism

- ▶ OCPs included Dianette® and Marvelon®
- ▶ Of the antiandrogen drugs, flutamide was considered to be more effective than placebo by both the women and the doctors. Spironolactone was also effective, but data were only available for the physicians' assessments
- ▶ Finasteride did not show convincing effectiveness
- ▶ The addition of cyproterone acetate (an antiandrogen) to OCP seemed to enhance the beneficial effect of OCPs on hair reduction
- ▶ Insulin sensitisers (antidiabetic drugs like metformin) and lifestyle modification did not have any demonstrable benefit in terms of the severity of hirsutism.

The adverse events reported with the different drugs are well known, ie pain in the stomach and intestines, breast tenderness, reduced libido and dry skin with flutamide and finasteride; irregular bleeding with spironolactone; nausea, diarrhoea and abdominal bloating with metformin; and hot flushes, decreased libido, vaginal dryness, breast tenderness and headaches with the GnRH analogues.

There were no important differences in blood androgen levels between the different treatment groups, OCPs had a positive effect on acne, and similarly insulin sensitisers improved the menstrual pattern.

Overall it was concluded that OCPs (especially with antiandrogenic activity) combined with cyproterone acetate, flutamide and spironolactone are effective in treating hirsutism.

Additional cosmetic measures (epilating, waxing, bleaching, electrolysis, laser and photoepilation) are generally required because all treatments need at least 6-12 months to reach the optimum effect. In addition, because of the distress associated with hirsutism and its impact on quality of life, psychological support should be part of the treatment approach.

Satisfaction predictors for patients seeking facial cosmetic surgery; to operate, or not to operate?

Jasmijn Herruer, Nijmegen, Netherlands

Facial cosmetic surgery is becoming more popular. Patients are generally satisfied but certain patient characteristics have been described as negative predictors for satisfaction. The purpose of the review was to define the negative predictors for satisfaction of facial cosmetic surgery and to find out whether there are valid preoperative assessment instruments available to determine these factors. A systematic review of medical literature on PubMed/Medline, the Cochrane Library and relevant studies from reference lists was carried out to identify negative predictors.

Negative predictors for satisfaction

- ▶ Body dysmorphic disorder (BDD)
- ▶ Patient characteristics
- ▶ Demographic
- ▶ Psychosocial
- ▶ Familial or relational issues
- ▶ Expectations

The search turned out to be quite complicated with the group looking at the evidence in numerous different ways to identify predictors. The result was 7 negative predictors.

Conclusions

Indication of 7 negative predictors for satisfaction after facial cosmetic surgery:

- ▶ Males
- ▶ Young age
- ▶ Unrealistic expectations concerning the surgical result
- ▶ Unrealistic expectations concerning secondary gain
- ▶ Minimal deformities
- ▶ Narcissistic personality
- ▶ Obsessive personality
- ▶ A suitable validated questionnaire is still lacking.

A brief personality assessment tool that could predict poor satisfaction could not be found. The authors suggest use of the Glasgow Benefit Inventory to assess patient satisfaction preoperatively. Further research is being undertaken to develop such an instrument. **DN**

ST JOHN'S WINS NEW BMJ AWARD FOR DERMATOLOGY, 2016

Congratulations to the medical dermatology team at St John's Institute of Dermatology, Guy's and St Thomas's Foundation Trust, who have just won the inaugural annual BMJ award for Dermatology Team of the Year (May 2016).

There were four other shortlisted dermatology teams: Beacon Medical Group in Plympton, Devon; Cumbria Medical Services; University Hospitals Bristol NHS Foundation Trust; and Bart's Health/Queen Mary University of London, all of whom demonstrated great innovations in modelling, practice or training across dermatology services.

The judging panel included two dermatologists, a representative from the charity Changing Faces and a GP. Each shortlisted team was invited to BMA House to make a brief presentation and answer questions from the panel.

The St John's team presented their work around achieving 'Holistic Care for Skin Disease' and illustrated this in their service for adults with severe psoriasis or eczema. Patients with severe psoriasis or eczema often carry a hidden burden of depression and low self-esteem, but psychological support has often been woefully inadequate. Although the team had insight into this common co-existence there had been a lack of skill and knowledge in how to best screen for this in practice and how to support patients.

A small but revealing patient survey conducted in St John's in 2012 showed the scale of the problem, with a mean score on the Hospital Anxiety and Depression scale of more than 20, where 11 or higher indicates a mood disorder. More than 60% of patients had never before been screened for psychological distress. Most expressed a preference to receive psychological support within the specialist service.



The St John's team, who won the BMJ award for their work around achieving 'Holistic Care for Skin Disease'.

The appointment of a psychologist has resulted not only in lending support to patients but also to teaching, training and research.

Several key organisations (NICE, BAD, WHO) have recommended the inclusion of psychological assessment and support as a key component of the care in skin disease, and mental health in the UK is a major government health agenda.

The team at St John's felt compelled to address this for their patients. They seized the opportunity to collaborate with the psychological health team at King's Health Partners and embarked on an initiative (IMPARTS) that provides physical health teams with training and development to better assess and support patients' psychological needs. The IMPARTS programme has enabled the dermatology team to select appropriate assessment tools to use routinely in practice in an electronic format, so that the data is readily available for use in consultations with patients. Referral advice and pathways were designed using existing resources to guide staff on options for ongoing patient support where concerns were identified.

Additionally, the development of self-help materials and the training of staff to provide direct support to patients with psychological distress was undertaken.

The results of routine screening not only enabled the implementation of a holistic approach to care, but also provided significant data to reveal an unmet need. This in turn was used to put forward a case for a psychologist post in the dermatology team, which was a successful bid. The appointment of a psychologist has resulted not only in lending support to patients but also to teaching, training and research.

The winning team at St John's were thrilled to win the award. Karina Jackson, Consultant Nurse and project lead says, "Our successful development and implementation of a holistic approach to care has been down to full team commitment and a 'can-do' approach and that has been recognised through this prestigious BMJ Award. I very much hope that others will be inspired by this model and reflect on how they can optimise holistic care for patients in their services'".

The BMJ Dermatology Team of the Year Award was sponsored by LEO Pharma. **DN**

NEWS FROM THE BDNG



*Susan Maguire
is the BDNG
Operations
Manager*

Conference 2016

We look forward to welcoming you all to our 26th Annual Conference in Bournemouth from 21-23 June. The final programme is on the BDNG website and it offers a wide range of topics to interest and engage all levels. We will also be holding Foot Dermatology for our podiatry colleagues and our fourth Derm School.

A Welcome drinks reception will be held on Tuesday 21 June in the Exhibition Hall after the last educational session of the day. Tickets are not required for this reception.

The Annual Conference Dinner will be held on Wednesday 22 June in the Bournemouth Pavilion. Following dinner, the Stone Achievement Award, Team of the Year Award and the new Psoriasis Nurse of the Year Award will be presented. The dinner is included in the conference delegate rate.

We have a record 50 exhibition stands at this year's event. Please do take the opportunity to visit our exhibitors whenever you have a free moment. If the stresses of the day become too much for you, visit Stand T where Onsite Plus will be offering chair back massages!

Dermatological Nursing will be at Stand A in the Exhibition Hall. Please

do pop by to meet the Editorial Team if you are interested in writing for the journal or if you wish to find out more information.

Our registration desk will be manned by Karen Jenkins, Rachel Maguire, Hannah Marsden and Rosemary Turnbull and you will get to meet them all when you collect your name badges and delegate bags at Bournemouth.

Symposia

Seven sponsored symposia will be taking place during Conference:

Wednesday 22 June, 13.45-14.45

Redefining Expectations of Topical Treatment in Psoriasis
Sponsored by LEO Pharma

Hidradenitis Suppurativa: The Disease, My Patients & Me
Sponsored by AbbVie

The Sun and Skin: Who, What and Why should we Photoprotect
Sponsored by La Roche Posay

Millefeuille: a Story of Psoriasis
Sponsored by Celgene

Thursday 23 June, 13.15-14.15

Development in the Use of Daylight Activated PDT
Sponsored by Galderma UK

Evolution of Treatment Approaches for Moderate to Severe Psoriasis
Sponsored by Lilly

Dermatology Today: Within and Beyond the NHS
Sponsored by Almirall

More information on the Annual Conference can be found at www.bdng.org.uk

BDNG baby

I am delighted to announce that Jamie, our administrator, had a beautiful baby boy, Ezra Thomas Jordan on 28 April. He weighed in at 9lb 12oz and arrived a little bit earlier than expected. Both Jamie and Ezra are doing well and Jamie will be off on maternity leave until mid-September.

Conference Awards 2016

I am delighted to announce the following recipients for Conference Awards 2016:

Valerie Anderson
Liz Burchell
Susan Mannix
Susan Franey
Nichola Holden
Belinda Lawson
Sarah Copperwheat
Jing Husaini
Farida Lachen

Sub-group meetings

4 November 2016	Photodermatology Skin Cancer Community Dermatology Camouflage	London
22 November 2016	Non-Medical Prescribing Contact Dermatitis Paediatrics Biologics	Manchester

Regional meetings

More information will be available on the website after Conference.

September 2016 TBC	Hilton Templepatrick (N Ireland)
24 September 2016	Newcastle
5 October 2016	Cardiff
21 October 2016	Edinburgh
16 November 2016	Reading



DERMATOLOGICAL NURSING

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substitute - Use as required when washing. **Contra-indications:** Hypersensitivity to any of the ingredients. **Warnings & Precautions:** Avoid eyes. Beware of slipping in bath. **Side-effects:** None known. **Legal Category:** Class 1 Medical Device. **Packs and basic NHS price:** 125g - £2.88, 500g - £4.89, 1kg - £9.09.

Full prescribing information is available from: Alliance Pharmaceuticals Ltd, Avonbridge House, Bath Road, Chippenham, Wiltshire, SN15 2BB. Date last revised: November 2014.

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard. Adverse events should also be reported to Alliance Pharmaceuticals (tel: 01249 466966, email: pharmacovigilance@alliancepharma.co.uk) www.alliancepharma.co.uk



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