NHS Fife

Skin Integrity

The Basics of Skincare

A Framework For Study Reflection

This resource has been accredited by the RCN Accreditation Unit until 20/05/2011

Fife Dermatology Liaison Nurses

CONTENTS

Handouts:

- Structure of the Skin
- Emollient classification chart
- Nice Guidelines Atopic Eczema in children
- Best Practice in Emollient Therapy

Introduction and guidance on:
Skin Integrity – The Basics of Skincare:
A Framework for Study Reflection

The Dermatology Liaison Nurse Service in Fife has been established for over 10 years, led by two Specialist Nurses with a combined Dermatology experience of 37 years. This experience has been gained whilst progressing through outpatient, day treatment unit and inpatient facilities. The role is pivotal in bridging the gap between primary and secondary care services, delivering ongoing care for dermatology patients in the community setting. This highly specialised role involves consultancy, with specialist knowledge and skills, education, advice and support across a wide range of disciplines.

To keep healthy, the skin must be intact i.e. its barrier function must not be compromised. (Cork 1997). The most effective way of looking after the skin is to take preventative approaches to promote skin health.

The skin, which is the largest organ of the body and most visible, is a complex multifunction organ which has the unique capacity to renew itself. The structure of the skin allows it to carry out its functions to maximum effect by providing an effective barrier to external irritants and maintains optimum hydration by supporting the natural lipids within the skin structure.

The skin is an organ of display and as such its appearance can profoundly impact on the psychological well-being of an individual. Promoting healthy skin not only prevents psysical skin deterioration, but also has a major impact on Quality of Life.

To achieve best practice it is vital that individuals and their carers have an understanding of emolliants and their theraputic effects (Dermatological Nursing 2007).

The format of the resource delivery would support a minimum of 5 hours study.

Pre-education emollient quiz	15 minutes assessing baseline knowledge
Power-Point presentation	60 minutes sharing key learning and practice
Interactive workshop	90 minutes evoking debate/conversation
Case studies/patient scenarios	60 minutes open forum to allow for discussion
Post-education emollient quiz	15 minutes assessing knowledge learned
Reflective exercise	60 minutes evidence of learning/reflection

The reflective exercise will guide you through self directed learning via an assessment worksheet. This can be achieved independently or discussed with colleagues.

Skin Integrity – The Basics of Skincare:
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Overall Aim:

The aim of this resource is to guide and assist in the dissemination of the necessary knowledge required to support preventative measures to ensure skin integrity. It is developed for healthcare professionals to ensure knowledge transfer to healthcare assistants and student nurses is robust.

Learning Outcomes:

- Explain why skin health is important
- Describe internal and external factors affecting the skin
- Identify Quality of Life issues affecting patients
- Select appropriate topical emollient
- Justify the choice of emollient and apply correctly
- Familiarise with bandages/garments and occlusive therapies

Skin Integrity
The Basics of Skincare

A Framework For Study Reflection

Barbara Page & Sheila Robertson 2008

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Promoting Skin Integrity

The basics of skin care .....

- ❑ Emollients
- ❑ Emollients
- ❑ Emollients

Skin

- ❑ Facts & functions
- ❑ Skin assessment
- ❑ Documentation/communication
- ❑ Promoting healthy skin
- ❑ Emollient therapy

Skin Facts .....

- ❑ The largest organ of the body
- ❑ Weighs approx 2.5kg (16% body weight)
- ❑ Covers an area approx 2 sq metres
- ❑ Contains over 1 million nerve endings
- ❑ Has ability to regenerate itself
- ❑ Cell renewal takes approx 28 days
- ❑ Contains approx 20% of total body water

Structure of the Skin

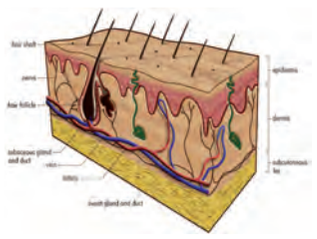
Epidermis: Outer layer

- Stratum corneum mainly composed of keratinocytes, 4 layers
- Basal/Prickle/Granular/Horny

Dermis: Inner layer

- Thick layer beneath the epidermis consisting of supportive connective tissue
- Collagen/Elastin

Structure of the Skin



Function of the Skin

- **Barrier**
- Temperature control
- Sensory
- Vitamin D synthesis
- Communication & display

Skin Assessment - Senses

Touch - Vital

Healthy skin should be smooth and supple but **not** hot

- ❑ Dry & rough - moisture loss/fluid intake
- ❑ Hot & smooth - inflammation/infection
- ❑ Skin turgor - poor nutrition
- ❑ Skin folds - sub mammary & groins
- ❑ Toe webs - site/entry of infection

Skin Assessment - Senses

Sight

The skin will provide visual clues - especially if the person cannot communicate

- ❑ Skin broken
- ❑ Skin scratched
- ❑ Unusual lesions

Skin Assessment - Senses

Smell

Important to recognise

- ❑ Poor hygiene
- ❑ Incontinence
- ❑ Fungal/bacterial infection can smell

Skin Assessment - Senses

Listening

This will help to find out more about the person

- Pain
- Discomfort
- Body Language

Dry Skin

Documentation & Communication

- Ensure accurate documentation
- Effective and timely communication is vital to the wellbeing of the patient

Essential Components of Observation

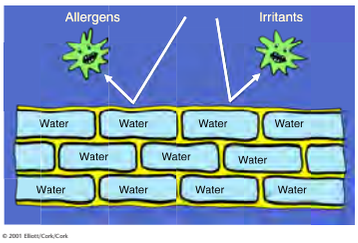
- Assessment
- Documentation
- Communication

Emollients

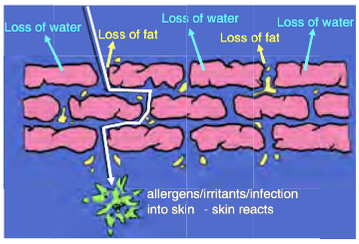
"Emollients are oils and lipids that spread easily on skin, providing partial occlusion that hydrates and improves the appearance of the Statum Corneum."

Rawlings A.V. et al., Dermatologic Therapy, Vol. 17, 2004, 49-56

Healthy Skin



Loss of Skin Barrier



Internal and External Factors Affecting Skin

1

Emollients Play a Vital Role in the Management of Skin Disease

- Definition and function
- Classification
- When to apply
- How to apply
- Which emollient

Emollient ...Definition and Function

- Medical term for moisturiser
- Safe
- Simple
- Effective
- Steroid sparing
- Intrinsic anti-inflammatory action

Emollient also help to .....

- Replace water lost from the skin
- Lubricate the skin
- Reduce scaling
- Seal the Stratum Corneum

Classification of Emollients

- **Lotions/Gels**
  Contain more water and less fat than creams
- **Creams**
  Contain a mixture of water and fat
- **Ointments**
  Do not contain water

Classification cont .....

- **Bath oils**
  Clean and hydrate - trap water in skin
- **Soap substitutes**
  Not astringent - not alkaline - **do not dry out the skin**

Aqueous Cream should not be applied as a left on emollient only as a soap substitute

Emollient ...When to Apply

- As frequently and liberally as possible
- At least 3 times per day
- After bathing when the skin is still moist

Emollient ...How to Apply Effectively

- Bathing
- Generously but gently
- Do not rub vigorously - may cause itching or irritation
- Smooth emollient along arms, legs and body following the natural hair growth

Emollient Base .....

Important point to remember .....

- Use a **cream** base for **moist/wet** skin
- Use an **ointment** base for **dry/cracked** skin

Emollient .....the Choice

- Paramount importance
- Cosmetic acceptability essential
- Compromise between efficiency and cosmetic acceptability

Quantities of Emollient

For an adult with dry or compromised skin

- Bath additives 300mls per month
- Creams or ointments 2000g per month

Emollient Chart

Appendix 2

Standard weight cream emollients: absorbed well, good patient acceptability

Product name	DIPROBASE	E45	CETRABEN	AVEENO	HYDROMOL	OILATUM
Emollient property	Yes	Yes	Yes	Yes	Yes	Yes
Soap Substitute	Yes	Yes	Yes	Yes	Yes	Yes
Formulation	Cream	Cream/Lotion	Cream	Cream/Lotion	Cream	Cream
Pump dispenser	Yes	Yes	Yes	No	Yes	Yes
Tubes	Yes	Yes	Yes	Yes	Yes	Yes
Possible sensitisers	Yes	Yes	Yes	Yes	Yes	Yes
Additional tips	Can smell when under occlusion	Uses hypo-allergic lanolin medilan	Easily absorbed no added fragrance	Oatmeal can help reduce itching	Good occlusive film reduces moisture loss	Good occlusive film reduces moisture loss

Medium weight cream emollients: absorbed well, good patient acceptability

Product name	UNGEUENTUM M	DOUBLEBASE	HYDROUS OINTMENT
Emollient property	Yes	Yes	Yes
Soap Substitute	Yes	Yes	Yes
Formulation	Cream/ointment mix	Cream/ointment mix	Oily Cream
Pump dispenser	Yes	Yes	No
Tubes	Yes	Yes	Yes
Possible sensitisers	Yes	No	No
Additional tips	Cream but moisturises like ointment	Teenagers like! Cool for babies	Used widely in plastics as emollient

Ointment Emollients: improved efficacy but less well accepted

Product name	50:50 WSP/LP	EMULSIFYING OINTMENT	YELLOW SOFT PARAFFIN	DIPROBASE OINTMENT	EPADERM OINTMENT	HYDROMOL OINTMENT
Emollient property	Yes	Difficult to use	Yes	Yes	Yes	Yes
Soap Substitute	No	Yes	No	No	Yes	Yes
Bath Emollient	No	Yes	No	No	Yes	Yes
Formulation	Ointment	Ointment	Vaseline	Ointment	Ointment	Ointment
Pump dispenser	No	No	No	No	No	No
Tubes	Smaller tubs	Smaller tubs	Smaller tubs	50g tubes	125gm tubs	125gm tubs
Possible sensitisers	No	Yes	No	No	Yes	No
Additional tips	For lichenification	Can mix to a cream	Sticky	Feels greasy	Can mix to a cream	Can mix to a cream

- Beware: infection in pots of emollient as they have no preservatives in them

Emollient Chart

Bath Emollients to pour into water

Product name	HYDROMOL BATH	OILATUM BATH / JUNIOR	E45 BATH	CETRABEN BATH	DIPROBATH	AVEENO BATH/ & COLLOIDAL	BALNEUM BATH
Emollient property	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Soap Substitute	Yes	Yes	No	Yes	No	Yes	Yes
Possible sensitisers	None	Yes	None	None	None	None in colloidal	Yes
Additional tips	-	Used medilan	More moisturising	-	-	Not slippy, bath toys stay cleaner	-

Emollients and Bath Emollients: with added extras

Product name	DERMOL 500/200	DERMOL 600	DERMOL CREAM	OILATUM PLUS BATH	BALNEUM PLUS BATH	BALNEUM PLUS CREAM	CALMURID CREAM	AQUADRATE CREAM
Emollient property	Yes	No	Yes	No	No	Yes	Yes	Yes
Soap Substitute	Yes	No	Yes	No	No	No	No	No
Bath Emollient	No / for shower	Yes	No	Yes	Yes	No	No	No
Formulation	Lotion	Bath Emollient	Cream	Bath Emollient	Bath Emollient	Cream	Cream	Cream
Pump Dispenser	Yes	N/A	No	N/A	N/A	Yes	Yes	No
Tubes	No	N/A	No	N/A	N/A	Yes	Yes	Yes
Possible sensitisers	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Additional tips	Antibacterial	Antibacterial	Antibacterial	Antibacterial	Antipruritic	Antipuritic/ Urea	Urea/ Lactic Acid	Urea

* Beware irritant reactions to antibacterial agents. Use products containing these for limited period only, rotating back to plain product

Soap Substitutes: not listed elsewhere

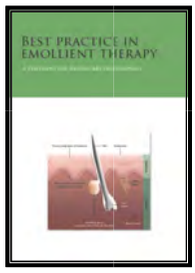
Product name	AQUEOUS CREAM	E45 WASH CREAM	OILATUM GEL
Emollient property	Should not be used as an emollient in children	Yes	Yes, apply to wet skin
Soap Substitute	Yes	Yes	Yes
Bath Emollient	No	No	Shower emollient
Formulation	Cream	Cream	Gel
Additional tips	Proven irritant reactions to sodium lauryl sulphate in children	-	Good for "hairy" areas
Pump dispenser	No	250ml	No
Tubes	Yes	No	Yes
Possible sensitisers	Yes	None	Yes

Which Emollient?

The very best emollient for any individual is ....

- **The one they prefer**

Best Practice in Emollient Therapy



Nice Guidelines Dec 2007

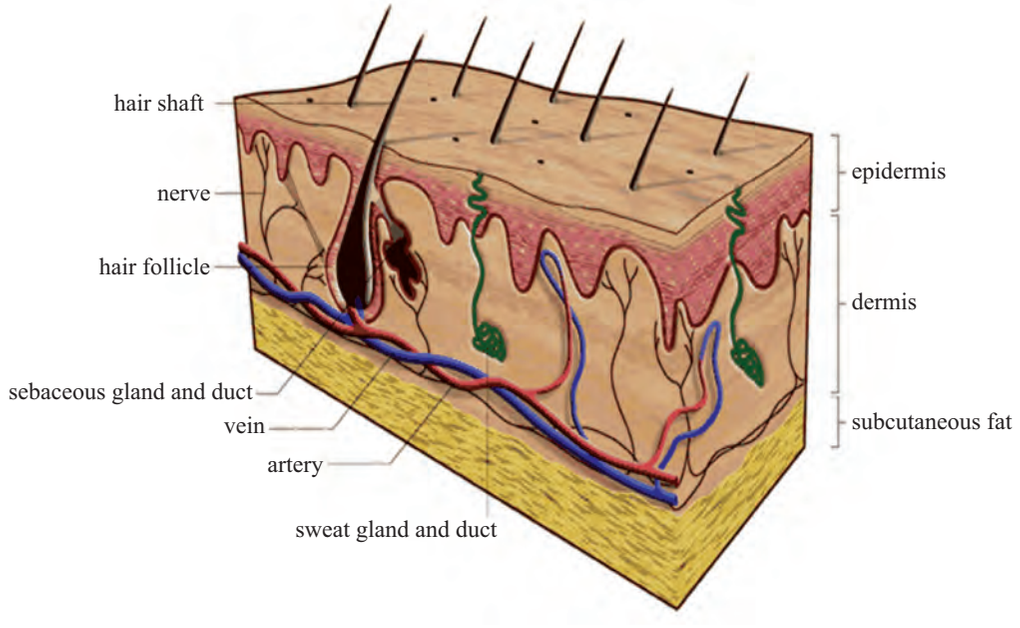
Case Histories – Dry Skin

Skin disorders are amongst the most common presentations to healthcare professionals. All ages may be affected and although most common skin disorders are not life threatening, the impact on everyday life and healthy living is substantial. To keep healthy, the skin must be intact i.e. its barrier function must not be compromised. The most effective way of looking after the skin is to take preventative approaches to promote skin health.

Our skin provides a strong, effective barrier that protects the body from infection or irritation. Skin is made up of a thin outer layer, a middle layer of elastin fibres and a fatty layer at the base. Each layer contains skin cells, water and fats, all of which help maintain and protect the barrier function of the skin.

The skin, which is the largest organ of the body and most visible, is a complex multi-function organ, which has a unique capacity to renew itself. The structure of the skin allows it to carry out its functions to maximum effect by providing an effective barrier to external factors and maintains optimum hydration by supporting the natural lipids within the skin structure.

The skin is an organ of display and as such its appearance can profoundly impact on the psychological well-being of an individual. Promoting healthy skin not only prevents physical skin deterioration, but also has a major impact on quality of life.



We would like you to consider 3 patients you may have encountered recently within your area of practice, affected by dry skin. Focussing on assessment and the provision of an optimum treatment plan, can we support these individuals to become independent and self managing?

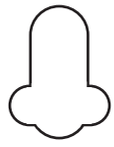
Assessment -
For visible signs of alteration in the skin surface

Remember to focus on the entire body and consider using four senses -

SIGHT

TOUCH

LISTENING



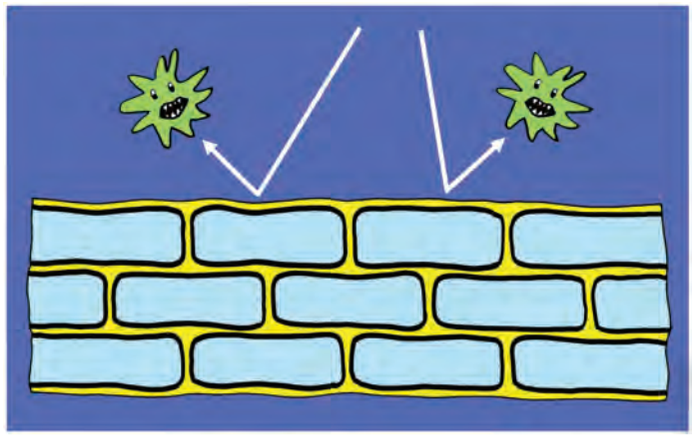
SMELL

To be used in conjunction with answer sheet.

Question A Which layer of the skin is mainly affected when dry skin is experienced?

Question B What is the purpose of this layer?

Visualise the brick wall representation discussed earlier and consider what changes are happening in the process of dry skin development:



Point C The corneocyte cells (bricks) contain a substance called natural moisturising factor which has the ability to attract and retain water.

The lipids (mortar) represent a strong barrier to moisture loss.

Remember environmental triggers are powerful stimuli to the development of inflammation. The dry skin may then become itchy which damages it further.

What points might be considered when planning treatment to relieve dry skin?

Is the skin itchy? - If it ***feels*** dry and itchy it is dry skin.

Discuss in your groups

Question 1 List Do's and Don'ts of dry skin management

Question 2 Consider some helpful hints, which could be introduced to make the environment less likely to dry the skin out.

TREATMENT

Emollients applied to the skin have:

an *occlusive* effect by forming a film over the skin, trapping water and preventing excess evaporation.

a *physical* effect by the addition of moisture, increasing the elasticity and pliability of the skin.

Discuss in your groups

Question 3 When advising on the application of emollients, what practical suggestions might be offered to patients?

Consider what the optimum treatment regimen would be for:

Question D Mild Dry Skin

Question E Moderate Dry Skin

Question F Severe Dry Skin

Complete emollient therapy involves a 3-stage approach of bath oil, soap substitute and topical emollient. Consider the quantities and packaging which will be required to support treatment for a 4 week duration, the minimum time required to grow a new layer of skin.

Remember:

The very best emollient for any individual is...***The one they prefer!*** Self management will only be achieved if we support the use of products which will be applied to the skin, not sit in a bathroom cabinet.

Self Assessment Worksheet

Skin Integrity - The Basics of Skincare

The following questions will help assess what you have gained from attending this event. Complete what you can independently and then refer to the resource pack for other information. Once completed, keep your answers/reflections, together with the relevant documentation in your professional portfolio.

Question 1

Name the two main layers of the skin and their components

Question 2

List 4 functions of the skin

Question 3

Skin assessment uses 4 senses - name them

Question 4

What are the 3 essential components to consider when assessing skin integrity?

Question 5

Define an emollient.

Question 6

List 4 internal/external factors affecting skin.

Question 7

List 4 functions of an emollient.

Question 8

List the 5 classifications of emollients.

Question 9

For an adult skin, what quantity of emollient should be prescribed for a month?

Question 10

Which is the best emollient?

A MODEL OF FRAMEWORK FOR REFLECTION

This form may be photocopied and included in the delegate packs.

PREP offers a framework for a lifetime of continuing professional development. Your portfolio provides a structural format for documenting and reviewing your reflections on your practice.

Now write your own notes using the following prompts:

- What have I learnt from this event that maintains or develops my professional knowledge and competence?

- What do I know or can I do now that I couldn't do before attending this event?

- What can I apply immediately to my practice and client care?

- Is there anything I didn't understand or need to explore further, or read more about in order to clarify my learning?

- What else do I need to do or know to extend my professional development in this area?

- What other professional development needs have I identified?
  This may be as a result of reviewing a work situation or incident in the light of the learning gained.

- How might I achieve the above needs?
  It may helpful to convert these needs into short, medium and long-term goals in an action plan.
  This can be included in your portfolio.

Further reading:

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RCN Accreditation Unit, 20 Cavendish Square, London W1G 0RN
Telephone: 020 7647 3647 Email: accreditation@rcn.org.uk Website: www.rcn.org.uk/accreditation

RCN ACCREDITATION

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