Choosing an emollient

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Emollients are used to keep skin healthy and prevent it from becoming dry. There are many conditions in dermatology that require the use of emollients and it is important to know which are suitable for an individual patient’s skin. Nurses should assess the skin and ask the patient their likes and dislikes—some may prefer a light lotion and others a heavier cream, for example. Selecting an emollient the patient is happy to use will aid good compliance and thus assist recovery of the skin.

This article will look at the role of emollients and the types available.

Skin structure
The complex organisation and structure of the skin has developed for many reasons, one being a barrier function (Watkins, 2008). Healthy skin provides an effective barrier to prevent the entry of organisms into the body. The outer layers of the epidermis consist of overlapping plates of keratin. These are surrounded by thin layers of lipids, which help to make the skin strong and flexible. This layer may be compared to a brick wall. If the lipids (mortar) dry out the skin can become compromised, causing dryness and cracking (Watkins, 2008). Altered skin barrier function, which results in increased transepidermal water loss, is typical in dry skin conditions (Nolan and Marmur, 2012).

Assessment
Assessment is the first step in making decisions about the type of emollient a patient requires in order to improve the condition of their skin. While examining the skin, the nurse can consider several questions: how old is the patient? Is the skin dry, flaky or scaly? Is it erythrodermic? Is it excoriated? Could there be an infection? What sites are involved? Next, the nurse can ask the patient a series of questions, such as: does the patient have a recognised skin condition? Have they used different combinations of emollients before? What worked or didn’t work? Can the patient apply the emollients easily or will they need assistance? These questions will help the nurse make an informed decision. Acceptability is vital for the patient when deciding and prescribing emollients as this supports concordance (British Dermatology Nursing Group, 2012).

Effects of emollients
Emollients have several effects:
- Moisturising: the action of emollients is to help replace lost lipids in the skin. They increase water content by trapping moisture in the epidermis
- Anti-inflammatory: emollients inhibit pro-inflammatory cells by blocking their activity, producing a soothing effect on the skin
- Antimitotic: many emollients have a low-grade antimitotic effect on the epidermis and can be useful in conditions such as psoriasis where there is increased epidermal mitotic activity
- Antipruritic: emollients can down-regulate cytokines in the skin, thereby reducing itching.

Types of emollients
Emollients consist mainly of lipids and oils. These hydrate and improve dry skin, restoring the flexibility and softness that has been lost (Sethi et al, 2016). They do this by filling any crevices in the corneocytes in the epidermis (Nolan and Marmur, 2012).

Ointments
These are ‘greasy’ preparations containing 80% fat/oil and 20% water, and are used where a certain degree of occlusion is necessary. They have a low risk of sensitisation as they have very few ingredients beyond the base fat. They have a longer lasting effect on hydrating dry skin than creams and lotions (Flavell, 2016). Ointments are often disliked by patients because of their greasiness and because they can be messy to apply. They can leave traces on clothes and furniture. These products historically came in pots but are now available in sprays, which are helpful in conditions where the skin should not be touched because it is uncomfortable and sore.

Gels
Probably the newest on the market of all emollients, gels are semisolid emulsions. Some gels contain alcohol as the active ingredient, and are self-drying. They also have an occlusive effect (Flavell, 2015). Gels are useful for areas of skin with hair and body folds. Gels usually have a high rate of acceptance by patients.

Creams
Creams are a mixture of oil and water in approximately equal quantities. Creams are thicker than lotions because they contain ingredients that help stability, which may cause sensitisation problems in some patients. Creams have a shorter lasting effect on the skin than ointments (Flavell, 2015). Aqueous cream is a product not recommended by dermatologists as a leave-on emollient due to the ingredient sulphur lauryl sulphate, which is an irritant.

Lotions
Lotions are usually a mixture of water with some oil. They can have a cooling effect on the skin (Duerden, 2017). Lotions need to be applied more frequently than creams or ointments due to their thin texture. Lotions are easy to apply and therefore useful for large areas of skin, and for hairy skin and skin folds.

Products containing liquid paraffin
It is well worth noting the Medicines and Healthcare Products Regulatory Agency (MHRA) warnings against products containing liquid paraffin (MHRA, 2016). Smoking or a naked flame could cause clothing or dressing to catch fire in patients being treated with such products. Although this is a real risk and should not be ignored, nurses can advise patients on how to apply these treatments safely. It is important to remember that patients need reassurance and
Humectants: these are substances that bond with water molecules to increase water content. Products such as glycerine, urea, honey and hyaluronic acid are some of the additives effective as a humectant, having the ability to draw water from both the dermis and the epidermis (Sethi et al. 2016). Products containing urea, although effective, can cause stinging and irritation in some people and these preparations are generally more expensive than others.

Antimicrobials: emollients containing antimicrobials are useful when the skin has a heavy growth of bacteria or is infected. They work by reducing levels of bacteria on the skin. They contain ingredients such as benzalkonium chloride or triclosan (Flavell, 2015). One potential problem is that patients may become sensitive to these.

Antipruritics: emollients enhanced with antipruritics contain substances such as lauramodacrols. These can be helpful in reducing itching.

Hygiene
Most creams, gels and lotions are available in pump dispensers. These are easy to use and reduce mess and are therefore acceptable to patients. They are also less likely to get contaminated (Chaplin, 2007). Ointments and creams that are contained in pots, however, may be easily contaminated by the patient’s fingers. Patients should be advised to decant from open pots into a clean bowl using a clean spoon. Any ointment or cream in the bowl that is not used should be discarded (Flavell, 2016).

Application
Emollients should be used frequently, and applied gently, using downward strokes to prevent the emollient being trapped under the hair follicle, which can cause folliculitis (Watkins, 2008).

Summary
All patients with dry skin or skin conditions should use emollients. Patient preference has always been the most important determinant of choice, but in recent years cost has been at the forefront of prescribing decisions.

Although cost cannot be ignored, ensuring the patient is happy with the choice of emollient prescribed is of utmost importance. B\textit{JN}

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