SKIN CARE MANAGEMENT FOR PATIENTS WITH LYMPHOEDEMA

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Patients with lymphoedema develop skin changes as a consequence of their condition. Many of these problems can be improved by appropriate daily skin care regimens that help to ensure the barrier function of the skin is maintained and the risk of infection reduced. It is important to remember, however, that skin care must be used in combination with other treatment such as compression therapy and exercise in this patient group.

Skin care helps to ensure the barrier function of the skin is maintained thus reducing the risk of infection. Fungal infections between the toes and in pronounced skin folds are frequently vulnerable sites where bacteria can enter the body through a breach in the skin's barrier, leading to serious cellulitis. This may be very severe and the patient will require hospitalisation and antibiotics. Frequent bouts of infection are thought to make lymphoedema worse.

Clear skin care regimens are important to teach the patient and their carers how to support the acidity and hydration of the skin. Maintenance of good skin integrity is important in avoiding infection, which can cause further swelling due to the inflammatory response.

One systematic review highlighted the advantage of skin care regimens over drugs in preventing infection (Badger et al, 2004). The following skin problems are often seen

in people with lymphoedema (Figures 1,2,3 and 4).

General principles of skin care

There are a number of general principles to remember when managing the skin care of patients with lymphoedema (these are referred to when discussing treatment below).

- 1. Avoid cosmetic soap as it tends to dry the skin
- 2. Avoid scented, perfumed products
- 3. Observe, check and monitor skin for cuts, abrasions or insect bites. Careful inspection is important if there is sensory neuropathy present
- 4. Ensure skin folds, if present, are clean and dry
- 5. Wash daily and dry thoroughly.

Emollients

Emollients are used to moisturise, lubricate and soothe the skin. They work by re-establishing the protective surface lipid layer

Table 1

Presentation of moisturisers

Ointments

Grease-based containing little or no water

- >> Hydrates dry and scaly skin well
- Used for dry and inflamed skin (can be used at night)

Creams

Mixture of oil and water

- >> Contain preservatives
- May make a dry skin condition worse (daytime use)

Lotions

Liquid creams

- >> Less moisturising
- To be used on normal skin (daytime use)

and enhance rehydration of the skin. They create a barrier that prevents further water loss and protects the skin from bacteria and irritants. Emollients come in many different formats such as:

- >> Bath oils
- >> Soap substitutes
- Moisturisers lotions, creams and ointments (Table 1).

Factors to consider when choosing a moisturiser

When trying to determine the appropriate moisturiser for the patient, consider:

- >> Skin condition
- >> Skin hydration
- >> Individual preference
- >> Known or potential contact sensitivity
- >> Cosmetic acceptability.

Treatment of normal skin

Follow general principles 1+2+3+4 as outlined in the general principles of skin care section, and:

- 1. Wash skin daily with aqueous cream or an equivalent soap substitute and dry thoroughly. Skin integrity can be improved by using mild, pH-balanced unscented soap during cleansing.
- 2. Apply emollients at night to soothe and hydrate skin. The minimum regimen needed is a daily application of bland, unperfumed moisturising cream.
- 3. Apply the unperfumed moisturiser in downward strokes to prevent blocking of the hair follicles (folliculitis). This application is different from lymphatic massage which is performed without the use of emollients. This can be undertaken by the patient, the carer or a nurse



Figure 1. Dry skin (slightly dry or flaky to rough and scaly).



Figure 2. Papillomas (raised projections on the skin).



Figure 3. Hyperkeratosis. Overproliferation of the keratin layers of skin can accumulate making the skin look brown or dirty grey.



Figure 4. Hyperkeratosis.



Figure 5. Wet skin (Lymphangioma [blisters] or lymphorhoea [weeping]).

- depending on the patient's condition and ability to provide self care.
- 4. Patients should not apply compression garments immediately after applying emollients. Oily or greasy emollients can damage compression garments and make application difficult. A cotton under-layer can be used to minimise damage.

Treatment of dry skin

Follow steps 1+2+3+4 (see general principles of skin care

above) and:

- ➤ Use paraffin-based emollients, such as 50/50 liquid and white soft paraffin (Vaseline) as they are absorbed better by dry skin.
- Ideally emollients should be applied twice daily. For deep cracked heels wash and dry thoroughly, apply Vaseline and cover with cling-film and a cotton sock overnight. Repeat this every night.

Treatment of hyperkeratosis

Follow the general principles of

skin care steps 1+2+3+4, then:

- ➤ Use paraffin-based emollients (as for dry skin) and multilayer bandaging which reduces oedema and also improves the skin. Autolysis will aid removal of scaly areas.
- Review the skin after one month and refer the patient to a specialist if the patient has been unresponsive to treatment.

Treatment of papillomatosis

Follow general principles 1+2+3+4 (see general principles of skin care above):

- Scrupulous skin care is needed for this condition.
- Compression controls the lymphoedema and can improve the papillomatosis.

Review the skin after one month and refer the patient to a specialist if they have been unresponsive to treatment.

Conclusion

Skin care is a fundamental nursing skill that applies to the care of all patients. It is often seen as basic and can easily be overlooked or rushed.

However, skin care, like all nursing practice, needs to be provided with knowledge and understanding of its component principles and the sensitivity necessary to meet the needs of the patient. This is particularly the case for people with lymphoedema. **WE**

Badger C, Preston N, Seers K, Mortimer P (2004) *Antibiotics/anti-inflammatories* for reducing acute inflammatory episodes in lymphoedema of the limbs (Cochrane Review). The Cochrane Library, Issue 3 Cichester, John Wiley & Sons Ltd