Improving efficacy of topical treatments for psoriasis

**Overview:** Psoriasis is a condition in which skin cells reproduce too quickly, causing red, flaky, crusty patches with silvery scales. It affects about 2% of the UK population and is a chronic condition that often goes through cycles and can return at any time.

Topical treatments are often the first-line treatment for psoriasis. However, epidemiological studies have shown that the efficacy of topical treatment in psoriasis is frequently suboptimal (Dubertret et al. 2006).

**Current advice:** There is no cure for psoriasis but several treatments are available to relieve symptoms, including creams and ointments, ultraviolet light (phototherapy) or oral and injected medication.

SIGN guidance recommends the use of topical therapies in the treatment of both mild and severe psoriasis (at least for selected body areas). The main groups of topical therapies for psoriasis are emollients, vitamin D and its analogue, topical corticosteroids (including combination preparations), coal tar preparations, dithranol, and tazarotene (a topical retinoid).

As well as differences in efficacy and side effects (most frequently local irritation) some of these preparations are easier to use than others for different patterns of psoriasis.

NICE has guidance in development on the management of psoriasis, which is due for publication this autumn.

**New evidence:** Topical treatments often have limited efficacy in the treatment of psoriasis, and it is thought that nonadherence, linked to unclear instructions given to patients on how to use them, is a contributing factor. To explore this hypothesis further a systematic analysis of 767 prescriptions written by dermatologists and GPs was carried out to determine the factors associated with high-quality prescription writing (Pouplard et al. 2011).

The French study considered prescriptions of high quality to be those which included at least four of the five quality parameters recorded, these being indication of formulation, frequency of administration, duration of treatment, areas to be treated, and amount of product to be used. Using this definition, 35.7% of prescriptions were classed as high quality, indicating that almost two thirds had insufficient information for patients to manage their topical treatment in psoriasis correctly. A quarter of the prescriptions fulfilled no more than two of the five quality criteria.

The study showed that the quality of prescription writing was significantly influenced by two main factors, electronic writing, and specialty of the prescriber, dermatologists writing higher quality prescriptions compared with GPs.

The authors conclude that improving the quality of written prescriptions may help to enhance adherence to topical therapy in psoriasis. They suggest that the quality of topical prescriptions could be improved by more widespread use of electronic prescriptions, and by developing aids for easy evaluation of the right amount of topical treatment to be applied according to body surface area involved.
Commentary: “Topical treatments for psoriasis most commonly fail because too little is used. Adherence to topical therapy is poor in psoriasis (Feldman et al. 2008). The quality of the written prescription (Pouplard et al. 2011) is a part of the chain of events that may influence adherence. However poor prescription writing may be a surrogate marker for poor prescriber understanding and poor communication, rather than the direct cause of poor adherence.

"Better education of prescribers is essential. Only then will prescribers be able to explain to patients about how much to use and be able to write high quality prescriptions. The development of electronic/educational aids is needed to promote this. This study argues for wider use of electronic prescribing: this is happening too slowly in secondary care.

"Understanding the Finger Tip Unit would be a good start (Menter et al. 2009). This is the amount of ointment squeezed from the index finger tip to the distal interphalangeal joint. It weighs about 0.5g (Finlay et al. 1989) and spreads over 2 "Handprint" areas (one Handprint = 1% body surface area) (Long et al. 1992).

"Most households have partly used tubes of cream in the bathroom cabinet, a direct result of poor adherence or inappropriate volume prescribing. Poor adherence results in inadequate therapy and in requests for further different prescriptions, with obvious cost consequences. There are potentially major cost savings to be made by improving adherence.” - Professor Andrew Finlay, Department of Dermatology and Wound Healing, Cardiff University School of Medicine

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