Q5: Which method for administering psoralen for Hand and Foot PUVA (gel, soaks or oral) is best?

A: Oral PUVA is for most the best – ideally with a Minimal Phototoxic Dose (MPD) test before treatment as a bioassay to check sufficient psoralen is in the skin 2 hours after ingestion (some use 2 hours for 8-MOP and 3 hours for 5-MOP) of the psoralen.

Advantages of tablets over topical are:

- Less time in hospital for patients.
- Better evidence of efficacy particularly for palmoplantar pustulosis (the study evidence is poor for most other hand and foot dermatoses although there is a suggestion that oral PUVA is more effective).
- Less involved for the phototherapy staff: if many patients are treated with topical PUVA this may mean longer waiting times, or even treatment unavailabilty, for other patients, depending upon unit staffing.

Disadvantages:

- Concomitant oral psoralens and oral theophylline is just about absolutely contraindicated (theophylline levels are increased which is a potentially serious issue with a drug with such a poor therapeutic index [the level that works is not much lower than that which can cause serious side effects]).
- As a precaution against cataract (possible increased risk) patients have to wear UVA eye protection for the rest of the daylight hours after taking the psoralen tablets (in children eye protection required for 24 hours post tablet ingestion).

A few individuals prefer topical PUVA because the eye protection can be avoided (as so little absorbed in comparison to normal dietary psoralen intake). Also, some prefer not to have to take tablets, particularly if they are already taking oral medicines. Lack of evidence of efficacy is not the same as evidence of lack of efficacy so for some individuals it is worth trying topical if a patient wants to.

Of the ways of administering topical PUVA to hands and feet, soaks are probably best – still quite a lot higher risks of localised phototoxicity than with oral psoralens (as less consistency in amount absorbed) but less risk of episodes of painful blistering than with gel or lotion (with both of which it takes just getting it on a small area that is exposed by mistake to cause a strong reaction). It may be that other topical formulations, such as a psoralen cream (not currently available in Scotland) will turn out to be better.

Ideally both oral, which should probably be the main PUVA used for localised hand and foot treatment, and soaks should be available.

<u>References</u>

Ling, T.C. et al. British Association of Dermatologists and British Photodermatology Group guidelines for the safe and effective use of psoralen–ultraviolet A therapy 2015. British Journal of Dermatology. 2016;174:24-55.