

Q9: When to stop pro topic before UV exposure?

A: Generally, at least 24 hours (and ideally a few days) before starting a course of ultraviolet (UV) treatment. The main issue is that tacrolimus (“Protopic” is tacrolimus ointment) immunosuppression might when combined with ultraviolet DNA damage increase skin cancer risks. It is not directly photosensitising. Most on oral tacrolimus (after transplants) start to get skin cancers on exposed sites about 5 years after transplantation.

The amount of tacrolimus in the skin can be just as great or higher with ointment as with tablet tacrolimus so when tacrolimus ointment first became more readily available (before “Protopic” was introduced it had to be made up specially) there was a major concern about skin cancer risks with it, especially if combined with ultra-violet. However, 1) people who have had transplants usually take other immunosuppressives in combination and 2) they are on it all the time without any breaks (whereas most using Tacrolimus ointment don’t use it all the time without any breaks).

Now, some years on since “Protopic” became available, it is reassuring that there has not been an epidemic of tacrolimus ointment skin cancers. Several now deliberately combine tacrolimus ointment and UVB for vitiligo. Most are still wary of this combination because of the theoretical risks and because there usually is no major extra benefit.

As a precaution it is still usual to avoid deliberately combining tacrolimus ointment and ultraviolet. How long a gap there should be is arguable, but the elimination half-life of oral tacrolimus (duration of effect in the skin when applied as an ointment has not been well studied) is 12 hours. It seems likely that it will not be exerting a strong immunosuppressive effect after 24 hours of application to the skin.