## **Helander Dermatology**

## Narrowband UVB phototherapy for your skin

I have recently purchased the latest narrowband UVB machine from Daavlin, a world leader in ultraviolet light skin treatment from Ohio in the USA.

This machine has state-of-the-art design with 48 tubes, internal calibration and the latest computer-controlled software to ensure safety and optimise your treatment.

### What is narrowband UVB phototherapy and how does it work?

Phototherapy uses ultraviolet light, which is invisible but not to be confused with ionising radiation such as x-rays or gamma rays. Ultraviolet light only penetrates the top layer of the skin with no effect on deeper structures. Phototherapy has been used for many years for treating inflammatory skin problems. It works by reducing unwanted inflammation in the skin without the side effects of taking oral medication which suppresses the immune system throughout the body.

Narrowband UVB uses a narrow wavelength of the ultraviolet light spectrum of 311-312, rather than broadband UVB which uses a much wider spectrum.

Compared to broadband UVB, narrowband UVB has the advantages:

- Exposure times are shorter but of higher intensity.
- The course of treatment is shorter.
- It is more likely to clear the skin condition.
- Longer periods of remission occur before it reappears.

# What conditions is narrowband UVB used for and why would I use this rather than other treatments?

Originally introduced for treating widespread psoriasis, narrowband UVB is also very useful in treating atopic eczema and other sorts of widespread dermatitis, vitiligo and a variety of other widespread skin conditions. It is particularly useful where the condition is either not responding to creams and ointments or too widespread for these to be practically used. In this situation it is a great alternative to having to use systemic pill based treatments which can have side effects on parts of the body other than the skin. Many patients find that their condition is better over summer months with exposure to sun, so UVB therapy over winter is very popular. It can be also used as rotational therapy with persistent widespread psoriasis and eczema, alternating with topical treatment and pill treatments. This has the advantage of the old adage "Everything in moderation", minimising the side effect of any one treatment where ongoing treatment is going to be needed. UVB treatment is also a great option during pregnancy and breastfeeding or for those already taking a variety of medication who want to avoid more pills.

#### What will be involved with my treatment?

Treatments are given between 2 to 5 - typically 3 times a week. Usually an improvement as seen in psoriasis after about 5 treatments and 75% of patients reach clearance, defined as 90% reduction of psoriasis compared to before starting, requiring between 10 and 40 treatments to achieve this. Eczema and vitiligo may take longer.

Treatment times gradually increase and this is all built into the computer software. Each treatment usually just takes a few minutes. Sunscreen should be applied to the face and hands unless these areas are to be treated. Special protective sunglasses are also worn. Underwear is worn during the treatment. If your condition is more localised, for example just involving the lower legs, you can also bring a T-shirt to protect the upper body, or light trousers or pyjama bottoms if just treating the upper part of the body. Sometimes an extra treatment may be given for example to the lower legs. Because treatment does not involve a consultation with me, appointment times can be very flexible including lunch hours.

### Are there any side effects?

Just as with sunshine, sunburn is possible with treatment. With a careful history and computer-controlled dosing, the risk of this is kept to a minimum. You should expect your skin to appear slightly red the day after treatment, but it should not very red or painful. Should you experience this, it is important that you tell my staff before you have your next treatment or call for advice. Sometimes the next treatment may be delayed or we will reduce the dose. There are no internal side-effects from ultraviolet light which is a great advantage of the treatment.