

Phototherapy

What is phototherapy?

Phototherapy uses different wavelengths of ultraviolet light to treat widespread skin diseases that cause inflammation (redness, scaling, itching, tenderness and swelling) in the surface and deeper layers of the skin, as well as conditions that cause loss of colour.

When is phototherapy used?

Phototherapy is commonly used to control widespread dermatitis (eczema) and psoriasis. It may be used to treat vitiligo, but response may be slower and recovery only partial. Phototherapy may also be used in less common conditions where it has been reported to be useful.

What types of ultraviolet treatments are there?

Narrow band ultraviolet B (NBUVB)

Narrow band ultraviolet B (NBUVB) phototherapy is the most frequently used. It has a wavelength of 311nm and has been shown to be effective in treating psoriasis, eczema and a number of other skin conditions.

Psoralen + UVA (PUVA)

Psoralen + UVA (PUVA) is another type of phototherapy that was used more frequently in the past. Psoralen medication is taken about an hour before treatment in the phototherapy cabinet. Psoralen makes the skin more responsive to a longer wavelength of ultraviolet light which can penetrate more deeply into the skin.

PUVA is no longer as widely used as NBUVB but in certain conditions may be more effective than NBUVB.

What will I have to do if phototherapy is prescribed for me?

You should let your dermatologist know about the medications you are currently taking. It is important to protect the eyes during treatment with either glasses or a facemask. You will be asked to stand still in a cabinet which has fluorescent tubes that produce ultraviolet rays on the walls.

Each treatment lasts from several seconds to several minutes. You can stop the treatment at any stage by simply opening the door and stepping out of the cabinet.

The dosage is determined by testing the response of a small area of non sun-exposed skin to a series of ultraviolet doses or by evaluating your skin type (fair, olive, dark, very dark). A protocol is then developed and followed based on this assessment.

Treatment is usually given three times per week (evenly spaced throughout the week) for 7 to 10 weeks. However, this may be adjusted after discussion with your dermatologist.

Treatment is stopped when the extent and severity of the inflammation is reduced enough to enable local treatments to be applied effectively.

It is important to attend appointments regularly to achieve the best possible outcome. It usually takes 2 to 3 weeks before an improvement in your condition is seen.

Phototherapy does not cure psoriasis or eczema and repeat treatment courses may be necessary.

While having treatment, it is important to be reviewed by a dermatologist every few weeks. The dermatologist will check for any side effects and ensure the treatment is optimal.

When is phototherapy not used?

You need to be able to stand still while the treatment is given. If you are unable to do this then phototherapy may not be an option.

Phototherapy is not used if you are unable to attend regular treatment sessions.

If you have a history of melanoma the risk of ultraviolet therapy generally outweighs its benefit. If you have a history of other skin cancers, ultraviolet therapy should only be undertaken with caution and close monitoring.

People with "sun sensitive" disorders (such as lupus or porphyria) or hereditary conditions (such as xeroderma pigmentosum) are not treated with phototherapy.

Some people may not be able to tolerate the confined space within the light cabinet.

What problems can occur with phototherapy?

Phototherapy often has a drying effect on the skin that may lead to increased itchiness.

Applying a simple moisturiser after your phototherapy treatment can be helpful.

Redness or a sunburn-like response may occur. With the use of usual protocols this reaction is not common but indicates that the dosage needs to be altered.

The same routine should be followed at each treatment session (e.g. same clothing worn/areas covered, same positioning within the cabinet). If a previously protected area of skin is exposed to ultraviolet light later in the course of treatment, it is likely to become burnt.

After many treatments the skin may become more tanned and may show some "photoaging" effects such as colour changes, wrinkling and increased skin laxity (looseness). Moles and freckles darken during treatment. However, if any moles are developing multiple new colours, becoming more asymmetrical or enlarging, they should be checked by your dermatologist.

If protective eyewear is not worn and the light administered enters the eyes, there is an increased risk of eye damage and cataracts.

In the long term there is a small increased risk of skin cancer. This risk is small with short courses of treatment, but may become more significant with longer or multiple courses.

In some cases the condition being treated may worsen. If you are significantly more uncomfortable from the treatment you should discuss this with your dermatologist.

What is the likely outcome of phototherapy?

Phototherapy treatment will usually be continued until the skin problem is clear or stable. In some cases treatments may be reduced in frequency rather than stopped completely. Any ongoing management should be under the supervision of your dermatologist.