Phototherapy for young people with severe eczema

Phototherapy (also called ultraviolet light or just light treatment) is an option for young people with severe eczema who do not respond enough to creams and ointments. Many people with eczema say that their eczema improves with some sunshine. Light treatment is offered in most hospital dermatological centres and is offered either in the form of UVB (ultraviolet B) light therapy or "PUVA", which involves a combination of a drug called psoralen taken by mouth, followed two hours later by UVA (ultraviolet A) light treatment. Both forms of light treatment can be very effective in severe eczema. Nowadays, the most commonly used form of UVB therapy is something called "narrowband" or "TL01" therapy, which simply means that the type of UVB contains more of the beneficial UVB rays and less of the burning UVB rays.

Short-term side effects of light treatment include dryness and sunburn-like reactions. Rarely, a sunlight-induced rash called polymorphic light eruption may develop whilst receiving ultraviolet light. If you are prone to cold sores, these can become activated by light treatment, so you might want to cover those areas with a sun block when having ultraviolet treatment. Potential long-term side effects only occur if many courses of light treatment are given and can include premature skin ageing and skin cancer.

How does phototherapy work?

Light therapy probably works by dampening down the overactive immune system in the skin of those with eczema, and it may also affect the rate of cell divisions. Ultraviolet light reduces inflammation in the skin and can help in various inflammatory skin disorders. However, although it can cause skin conditions to clear for a while, it is not a cure.

What does phototherapy involve?

Ultraviolet treatments are usually given in a hospital outpatient department, two to three times a week, in a walk-in cabinet containing fluorescent light bulbs.

The average course for severe eczema lasts between twenty five and forty treatments. The starting dose is worked out at your initial educational session either by asking how well you tan in sunlight or by performing a test dose of ultraviolet light on an area of your skin. The first few treatments will often last less than one minute. Then, the time you spend in the ultraviolet light machine will gradually increase, up to a number of minutes.

Light therapy can be given to young children (as young as three years, depending on the child). The child can listen to their own music, and they are always in direct contact with their parents or carers through an intercom. There is also a camera in the light machine so that the person inside can be monitored at all times by the light therapy nurse. Most children and young people with severe eczema who need ultraviolet light will expose all their skin to the light, except the eyes (which will be protected by goggles) and male genitalia (which should be covered).

PUVA treatment is usually only considered for young adults (or older) and involves making your skin more sensitive to UVA light by taking a tablet called a psoralen 2 hours before each treatment. Sometimes, the psoralen is applied to the skin in the form of solution in the bath – called bath PUVA. People having PUVA treatment need to wear sunglasses for 24 hours after taking psoralen tablets in order to protect their eyes from natural ultraviolet light.
What reasons might prevent you having phototherapy?

- If you are unable to attend regularly for treatment
- If you are unable to stand unaided for up to ten minutes
- If your skin condition is made worse by ultraviolet light
- If you are taking a medicine which suppresses your immune system, such as ciclosporin or methotrexate
- If you are claustrophobic

What are the precautions whilst having phototherapy?

- Avoid other forms of ultraviolet exposure e.g. solariums, sun beds or sun bathing during the treatment course.
- Avoid prolonged exposure to direct sunlight on treatment days to avoid burning. This can be done by wearing suitable clothing e.g. closely woven clothing, high neck, long sleeves, hat, and gloves or by applying sunscreen regularly.
- You should tell the doctor or nurse if you start on any other tablets or creams during your treatment course, including herbal preparations, because they may make you more sensitive to ultraviolet light.
- Avoid excessive quantities of foods such as celery, carrots, figs, citrus fruits, parsnips and parsley, which can make your skin more sensitive to light.
- You should not wear deodorant; make up, perfumes or after-shave before your treatment.
- You should not wear watches or jewellery.
- You should not apply any creams or emollients (moisturisers) to your skin for 2 hours before your treatment or they will interfere with the light absorption into the skin.
- You should wear the goggles provided by the department when receiving your light therapy. Always wear the same style, as there are three different styles available.
- Boys normally wear pants during the light treatment.
- It is important that you adopt the same position in the light therapy machine each time to avoid burning of previously unexposed areas.
- Make sure you put plenty of your chosen emollient after the light therapy treatment in order to stop your skin from drying out too much.
- You must always inform the light therapy nurse if you experience any discomfort such as burning or prickling sensation after a light therapy treatment.
- Avoid significant haircuts, as they may result in burning of previously covered skin.

Where can I get more information about phototherapy?

You can find more information about phototherapy on the following websites:

- http://www.dermnetnz.org/procedures/puva.html
- http://www.photonet.scot.nhs.uk/publicportal.htm

For further advice please contact
Nurse Consultant Dermatology Sandra Lawton
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Queen’s Medical Centre
Clifton Boulevard
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Email: pils@nottinghameczema.org.uk
Website: www.nottinghameczema.org.uk

For advice on support issues please contact the NSGCCE via the website
www.nottinghameczema.org.uk and click on the contact icon at the top of most pages or email us at enquiry@nottinghameczema.org.uk

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