POLYMORPHIC LIGHT ERUPTION

What are the aims of this leaflet?

This leaflet has been written to help you understand more about polymorphic light eruption (PLE). It tells you what it is, what causes it, what can be done about it, and where you can find out more about it.

What is PLE?

The term 'light eruption' is easy to understand - a rash that comes up after exposure to light. 'Polymorphic' is more difficult. 'Poly' means 'many', and 'morphic' means 'forms'. In other words, the rash of PLE can take many different forms, including small red bumps, larger red areas, and blisters. In PLE, a rash with one or more of these components comes up a day or two after exposure to the sun. PLE is common, perhaps affecting up to 10% of the population. It tends to appear in the spring.

What causes PLE?

PLE is a response to sunlight. As little as 20 minutes of strong sun can trigger it. PLE can come up even when the light has passed through window glass, and sometimes even after exposure to fluorescent lighting. Both long (UVA) and short (UVB) wavelengths of ultraviolet light can cause PLE in a susceptible person, but it is still not clear how they trigger the rash. An immunological reaction seems the most likely explanation.

Most people with PLE get it in the spring after they go out in the sun. Often it comes up on a holiday abroad, and sometimes it clears up before they return home. The rash tends to affect areas that have been covered by clothing during the winter. It goes away without treatment in about a week if there is no further sun exposure. If you stay in the sun, the rash will get worse and spread; but as the summer wears on, the skin becomes resistant to sunlight and more of it is needed to provoke the rash.

4 Fitzroy Square, London W1T 5HQ
Tel: 020 7383 0266 Fax: 020 7388 5263 e-mail: admin@bad.org.uk
Registered Charity No. 258474

Other points about PLE:

- Women get PLE more often than men.
- It usually starts under the age of 30.
- It affects people with all types of skin but is most common in those who are fair.
- It is most common in countries where the climate is temperate, and exposure to the sun is usually not heavy.
- It is not infectious and has no connection with skin cancer.

Is PLE hereditary?

Probably not, although about 15% of those who have PLE know of other family members who have it too.

What are the symptoms of PLE?

- The rash of PLE can itch or feel like a burn.
- PLE can be embarrassing as it comes up on exposed areas.
- It restricts outdoor activities and holidays in the sun.

What does PLE look like?

- PLE ranges from a mild rash that lasts for only a short time to a severe and extensive eruption that spoils the quality of life.
- The rash comes up equally on both sides of the body, affecting mainly those parts of the skin that are kept covered in the winter – such as the arms and the upper trunk. For this reason the face and the backs of the hands are sometimes, but not always, spared.
- The appearance of the rash varies from person to person. The most common type has large numbers of small red bumps. In other people the rash is made up of larger red areas and small blisters. The rash of each affected person usually looks the same every time it comes back.
- When the rash settles, it does so without leaving scars.

How will PLE be diagnosed?

Your general practitioner may refer you to a skin specialist who will base the diagnosis of PLE on the appearance of the rash and the story that it has been provoked by sunlight. Tests will be done to rule out other conditions that can cause sun sensitivity, such as lupus erythematosus. Phototesting (trying to reproduce the rash by testing the skin with different amounts and wavelengths of ultraviolet and visible light) is sometimes helpful too.

Can PLE be cured?

No treatment will get rid of PLE forever. However, many people remain clear if they avoid exposure to the sun and use an effective sunscreen. The tendency to get PLE may go away by itself after a few years.

How can PLE be treated?

When the rash comes up, a corticosteroid cream or ointment will help to settle it, but prevention is better than cure.

Mild PLE can be controlled by:

- Avoiding sunlight between 10 a.m. and 3 p.m. Stay in the shade.
- Using a wide spectrum sun block (one that blocks both UVA and UVB) with a high protective factor. Remember to put it on several times a day.
- Wearing protective clothing – broad-brimmed hats, gloves, and long sleeves.

The measures listed above help, but carrying them out can be tiresome and restrict your activities and enjoyment of life.

If so, *desensitisation treatment* can be considered. This is a way of raising your skin's resistance by treating it with increasing doses of ultraviolet light in a special phototherapy cubicle. The treatment is given in the early spring so that your skin is ready to cope with the summer sun. After the course of desensitisation treatment is over, you should keep up your newly acquired resistance to ultraviolet light by exposing your skin carefully to increasing amounts of sunlight - but not to the point at which the rash comes out again. You will learn how to do this by trial and error. The effect of desensitisation treatment wears off in the winter, so it has to be repeated every spring.

A few people with bad PLE may still have problems despite the measures listed above. Some tablets (such as hydroxychloroquine), which are usually prescribed for malaria, may help to cut down your sensitivity to the sun, but carry the risk of causing side effects. A short course of oral steroids can be considered at times e.g to cover a summer holiday. If very resistant to treatment, strong agents like azathioprine can also be used.

What can I do?

- Learn how much sunlight your skin can tolerate, and keep within that limit.
- Be sure to introduce your skin gradually to sunlight in the spring.

Where can I get more information about PLE?

Web links to detailed leaflets:

www.netdoctor.co.uk/diseases/facts/lighteruption.htm

www.emedicine.com/derm/topic342.htm

http://www.dermnetnz.org/reactions/pmle.html

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

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4 Fitzroy Square, London W1T 5HQ
Tel: 020 7383 0266 Fax: 020 7388 5263 e-mail: admin@bad.org.uk
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