ACTINIC PRURIGO

What are the aims of this leaflet?

This leaflet has been written to help you understand more about actinic prurigo. 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 actinic prurigo?

The term 'actinic prurigo' is the term used for a rare (less than 1:1,000) type of skin sensitivity induced by sunlight (photosensitivity); 'actinic' is Greek for 'sunlight', 'pruritus' is the medical term for itching, and 'prurigo' is a related word which describes the changes that appear in the skin after it has itched and been scratched for a long time. In actinic prurigo the skin becomes firm, raised and itchy on the areas of the skin surface which are exposed to the sun.

What causes actinic prurigo?

Actinic prurigo occurs in affected individuals following exposure to sunlight. The reason why this reaction between skin and sunlight occurs remains unclear. Current research suggests that actinic prurigo may be an allergic reaction to proteins altered by sunlight in people who have inherited certain genes. The condition sometimes runs in families.

Other facts about actinic prurigo:

- Women appear more susceptible to actinic prurigo than men, with a ratio of 2:1.
- It usually starts in childhood and young adults.
Actinic prurigo can affect anyone, but is most common in Native Americans; it rarely affects those indigenous to Europe and Asia.

**Is actinic prurigo hereditary?**

Yes in some people. Actinic prurigo is associated with a positive test for a gene called HLA DR4. One type of this gene is called DRB1*0407 subtype which is present in 60-70% of actinic prurigo patients.

**What are the symptoms of actinic prurigo?**

The main symptoms of actinic prurigo are severe itching and painful inflammation of sun-exposed skin. Lips can become dry and sore (chelitis) and eyes red (conjunctivitis).

**What does actinic prurigo look like?**

Actinic prurigo causes a rash which appears as red inflamed lumps, with thickened patches that have scratch marks. These scratch marks are always present in actinic prurigo and considered as a sign of itching. The rash usually appears hours or days following sun exposure (although the patient may not initially associate the link between sun-exposure and the onset of the rash).

This rash may appear on the sun-exposed areas of the face (e.g. the cheeks, nose, forehead, chin and earlobes), the neck and chest, as well as the upper sides of the arms and hands. Covered sites such as the buttocks may also become involved. It may resemble a type of eczema which is more severe on sun-exposed sites. Other affected areas include the lips which are involved in 60-70% of people (and may be the only affected site), and the eyelids and lining of the outer side of the eye which are affected in 45% of patients.

Symptoms are usually worse in spring and summer months; this is due to the sun usually being stronger during such times. In some patients signs and symptoms persist throughout the year, particularly in some temperate climates where the difference between the summer and winter months is not great and it is mostly sunny all year round.

**How is actinic prurigo diagnosed?**

A dermatologist can diagnose actinic prurigo by assessing the visual symptoms and the patient’s recent sun exposure. Additional investigations to confirm the diagnosis include special blood tests of the immune system and
urine tests (to exclude other rare diseases which cause sensitivity to the sun such as lupus and porphyria) and phototesting (to see how the skin reacts to ultraviolet and visible light). You may be referred to a specialised photodermatology department in another hospital for the phototests and other investigations.

**Can actinic prurigo be cured?**

There is no cure for actinic prurigo. Some cases do spontaneous get better; however, the majority of cases persist for several years during which time the rash comes and goes.

**How can actinic prurigo be treated?**

*Photoprotection*

Taking measures to avoid sunlight exposure is important to prevent its occurrence and may require major adjustments to a person’s lifestyle. Such steps to help prevent eruptions include the following top sun tips:

- Protect your skin with clothing, and don’t forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Spend time in the shade between 11am and 3pm when it’s sunny. Step out of the sun before your skin has a chance to redden or burn.
- When choosing a sunscreen look for a high protection SPF (SPF 30 or more) to protect against UVB, and the UVA circle logo and/or 4 or 5 UVA stars to protect against UVA. Apply plenty of sunscreen 15 to 30 minutes before going out in the sun, and reapply every two hours and straight after swimming and towel-drying.
- Sunscreens should not be used as an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels.
**Vitamin D advice**

The evidence relating to the health effects of serum Vitamin D levels, sunlight exposure and Vitamin D intake remains inconclusive. Avoiding all sunlight exposure if you suffer from light sensitivity, or to reduce the risk of melanoma and other skin cancers, may be associated with Vitamin D deficiency.

Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

- Using photoprotective window films: Some people may need to apply special photoprotective window films to the windows of their car and home in order to block out UVA and UVB light. These protective films may stop working and need replacing after about five years. Some car manufacturers offer UV protective glass as standard or as an optional extra, however most car windows do not block UV light. Your dermatologist or a patient support group may be able to advise you about suppliers of UV protective film. The British Photodermatology Group has released a consensus statement on UV protective films.

**Creams and ointments**

Moisturising creams and steroid creams usually benefit affected areas. Potent and very potent topical corticosteroids can lead to reduced redness and irritation and are often helpful in relieving the itch and discomfort.

**Desensitising light therapy (e.g. narrowband UVB, or PUVA (a combination of a drug called psoralen (P) and long wave ultraviolet radiation (UVA))**

This is used only when the condition is not responding to other treatments. For some people this can desensitize the skin to sunlight so that the reaction becomes less when exposed to sun.

**Oral medications in the form of tablets**
Occasionally, people with severe actinic prurigo require tablets to control their skin disease. Options for tablet-based therapy are listed below:

- Steroid (prednisolone) tablets for short courses.
- Thalidomide. Once improvement occurs the drug should be gradually reduced, then stopped. It can be started again in cases of relapse. Because thalidomide may cause birth deformities, it must be used cautiously, particularly in women of childbearing years.
- Antimalarials such as hydroxychloroquine.
- Other immune system suppressing tablets such as azathioprine or ciclosporin.

Please note that some of these medications are potent and can have side effects. Patients need to be carefully monitored when prescribed these drugs.

Where can I get more information?

Web links to detailed leaflets:

http://www.dermnetnz.org/reactions/actinic-prurigo.html
http://www.pcds.org.uk/clinical-guidance/actinic-prurigo

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

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: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists’ Patient Information Lay Review Panel