

Lee Clinic Dermatology Information Leaflet

Bowens Disease

What is Bowen's disease?

Bowen's disease is also known as squamous cell carcinoma in situ, and is a growth of cancerous cells that is confined to the outer layer of the skin. Its importance rests on the fact that it can progress into an invasive skin cancer (squamous cell carcinoma). For this reason, dermatologists usually treat Bowen's disease.

What causes Bowen's disease?

Most cases of Bowen's disease develop as a result of long-term sun exposure. Very occasionally, Bowen's disease may be seen in the context of previous radiotherapy, following chronic arsenic ingestion (very rare nowadays) or on the genitalia in association with the virus that causes warts (the human papillomavirus). Bowen's disease is neither infectious, nor due to an allergy.

Is it hereditary?

No, but some of the factors that increase the risk of getting it, such as a fair skin and a tendency to burn in the sun, do run in families.

What are its symptoms?

Often there are no symptoms, although the surface crusting may catch on clothing.

What does it look like?

A patch of Bowen's disease starts as a small red scaly area, which grows very slowly. It may reach a diameter of a few centimetres across. It commonly occurs on sun-exposed skin, especially the head, hands and lower legs. More than one lesion may be present. The development of an ulcer or lump on a patch of Bowen's disease may indicate the formation of invasive squamous cell carcinoma.

How will it be diagnosed?

A patch of Bowen's disease can look rather like other skin conditions, such as psoriasis. For this reason a biopsy may be needed to make the diagnosis.

Can it be cured?

Yes. As Bowen's disease is confined to the surface of the skin, there are a variety of ways in which this can be achieved (see below).

How can it be treated?

A number of treatments are available for Bowen's disease:

- Freezing with liquid nitrogen. This is done in the clinic. It causes redness, puffiness, blistering or crusting, and may be slow to heal. It can be done in stages for large areas of Bowen's disease.
- Curettage. This involves scraping off the abnormal skin under a local anaesthetic. The area then heals with a scab, like a graze.
- Excision. The abnormal skin can be cut out, under local anaesthetic.
- 5-fluorouracil (Efudix) cream. This is a cream that may control or eradicate the disorder. There are various different ways of using it, and, if it is felt to be the best treatment, the doctor who sees you will explain these to you. Efudix works by killing the abnormal skin cells. This means that the skin will become red and look worse during treatment, and will then heal after the end of the course of treatment, once the abnormal cells have gone
- Imiquimod (Aldara) cream. This was originally developed for the treatment of genital warts, but imiquimod cream has been found useful in treating Bowen's disease. It also causes inflammation of the skin during treatment.
- Photodynamic therapy. A chemical is applied to the skin that makes the cells in the patch of Bowen's disease sensitive to particular wavelengths of light. Light from a special lamp is then shone onto the lesion. This treatment can be painful and cause inflammation; however any inflammation should disappear within a few days.
- A particular problem with Bowen's disease is that it is frequently found on the lower leg - where the skin is often tight and sometimes quite fragile, especially in older patients. Healing there is slow. Many factors, therefore, play a part in selecting the right treatment:
 - The size and thickness of the patch
 - The number of patches
 - The presence of swelling of the legs
 - The general state of the skin on the legs

If the affected area is judged to be thin and not likely to cause problems soon, your dermatologist may simply suggest that it is kept under observation in a clinic, or in some cases by yourself or by your GP.

Self care (What can I do?)

- From now on, you should take sensible precautions to prevent additional patches of Bowen's disease developing. This means wearing clothing that protects you against the sun, avoiding strong sunlight, and using a sun block with a sun protection factor (SPF) of at least 30.
- Check your skin regularly for new patches.
- The smaller your patch of Bowen's disease is, the better the results of treatment are likely to be. If you think another one is developing, see your doctor about it promptly.
- If your patch changes in any way (e.g. bleeds, ulcerates or develops a lump) contact your doctor as soon as possible as this could be the start of an invasive skin cancer.

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.

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