Bowen's disease

Summary

- Bowen’s disease is a type of slow-growing and red, scaly skin patch.
- It is generally considered to be a pre-cancerous condition, with a small risk of turning into a skin cancer.
- The condition typically affects elderly women.
- Treatment options include cryosurgery, curettage, photodynamic therapy, medicated ointments and surgery.

Bowen's disease is an early form of skin cancer that appears as a persistent, slow-growing, red and scaly skin patch. In Bowen’s disease, the skin cancer is located only in the epidermis, the uppermost layer of the skin.

Rarely, the skin cancer can invade into the dermis and then it is called an invasive squamous cell carcinoma. Only invasive squamous cell carcinoma can metastasise to other parts of the body and become a life-threatening skin cancer.

Bowen’s disease can occur on any part of the body, although the lower legs are most commonly affected. It is easily mistaken for psoriasis, another skin complaint characterised by red scaly patches.

Fair skin and exposure to sunlight are the main risk factors for Bowen’s disease. Women are more susceptible than men and most cases occur in people over 40 years. The condition isn't contagious and treatment is usually successful.

Signs of Bowen’s disease

The signs of Bowen’s disease include:

- Flat, scaly, red and slightly raised patches appear and persist for months to years.
- A single patch or a number of patches may be present.
- The edges of each patch are irregular, but distinct from the surrounding skin.
- Each patch grows very slowly.
- Bowen’s is asymptomatic (has no symptoms) and therefore is easily overlooked.
- Bowen’s can affect any part of the body, but commonly occurs on the lower leg.
- Only rarely are the patches sore or irritated.

Bowen's disease may become invasive

In most cases, Bowen’s disease remains confined to the upper layer of the skin (epidermis). However, if left untreated, the affected cells may migrate deeper into the skin layers. If a patch of Bowen’s disease becomes raised, tender or is bleeding, then it will need immediate medical attention.

Risk factors for Bowen's disease

The cause of Bowen’s disease is often unknown, but known risk factors include:

- Gender – the condition is more common in women.
- Age – the condition is more common in people over 40 years. Elderly women are particularly prone.
- Sun exposure – Bowen’s disease is more common in sunny countries. Bowen’s is most common on parts of the body exposed to direct sunlight.
- Arsenic – people who are exposed to arsenic are at increased risk.
- Systemic immunosuppression – this is required by organ transplant recipients to prevent organ rejection.
- Viral infection – infections with certain subtypes of the human papilloma virus (wart virus) can predispose to
Bowen's disease. This is especially relevant for genital Bowen's disease.

**Diagnosis of Bowen's disease**
Bowen's disease produces persistent red scaly patches on the skin that are not sore or itchy. Bowen's disease is easily overlooked. It is not unusual for Bowen's disease to be diagnosed during a routine skin examination.

Diagnosis methods include:
- physical examination
- medical history
- biopsy of the lesion, including laboratory examination of the tissue sample.

**Treatment for Bowen's disease**
Treatment options include:
- Cryosurgery – the lesion is destroyed with intense cold. This type of treatment has a success rate of around 90 per cent when conducted by specialists.
- Curettage – the lesion is scraped off the skin with a curette and the base of the wound is treated with cauterisation, where the skin is lightly burnt with an electric current. It has a success rate of around 90 per cent when performed by dermatologists.
- Photodynamic therapy (PDT) – a special type of light is used to destroy the lesion. Success rates are in the order of 60-80 per cent with a specialist.
- Topical creams – these are applied to the lesion to kill its cells. They include 5-fluorouracil cream and Imiquimod cream. Success rates are similar to PDT.
- Surgery – the lesion is cut out and the wound is sutured closed. This treatment has a near 100 per cent success rate, but will leave a surgical scar.
- Radiation therapy – is rarely used now.

**Where to get help**
- Your doctor
- Dermatologist

This page has been produced in consultation with and approved by:
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