PYODERMA GANGRENOSUM

What are the aims of this leaflet?

This leaflet has been written to help you understand more about pyoderma gangrenosum. It tells you what it is, what conditions may be associated with it, what can be done about it, and where you can find out more about it.

What is pyoderma gangrenosum?

Pyoderma gangrenosum is a rare treatable cause of skin ulceration. It is not a type of gangrene. Pyoderma gangrenosum is not contagious and cannot be transferred from person to person.

What causes pyoderma gangrenosum?

Approximately 50% of people with pyoderma gangrenosum have no known cause for it. In some cases it may start after trauma to the skin. Other cases are associated with an underlying medical condition such as inflammatory bowel disease, arthritis or certain blood disorders. It is important to know that having pyoderma gangrenosum does not mean that you have these diseases but your specialist or doctor will consider and exclude these.

What does pyoderma gangrenosum look like?

Pyoderma gangrenosum usually occurs in young to middle-aged adults. The appearance of the condition may vary. It may start as a small pimple, red bump, pustule or blood-blister. The skin usually breaks down to form an ulcer which often oozes fluid. The ulcer can enlarge rapidly. The edge of the ulcer may look purplish. The most common place for pyoderma gangrenosum to occur is on the legs, but it may occur on any part of the skin. Sometimes it may occur around the site of a stoma (e.g. colostomy), or in a surgical wound.
What are the symptoms of pyoderma gangrenosum?

There is usually a single large ulcer. Occasionally there may be multiple ulcers. Ulcers may become infected, oozing fluid or pus. Pain or discomfort from the ulcer is common. Pyoderma gangrenosum is not a skin cancer and does not lead to cancer.

How is pyoderma gangrenosum diagnosed?

There is no specific blood test for pyoderma gangrenosum. Certain conditions such as venous ulcers, blood vessel or skin inflammation, infection, injury, and cancer can look like pyoderma gangrenosum. Your doctor may take a sample of skin (biopsy) to examine under the microscope in a laboratory to confirm the diagnosis. The wound may be swabbed to rule out infection. Your doctor may also consider blood tests or other tests to rule out any conditions that might occur with pyoderma gangrenosum.

It is not hereditary and is not passed from parents to their children.

How can pyoderma gangrenosum be treated?

Pyoderma gangrenosum is often difficult to treat and may take some time to heal. More than one treatment may need to be tried. Skin grafts and surgery are not treatment options as they often fail and may cause enlargement of the ulcer.

Treatment may be divided into local treatment (topical) or systemic. The specific treatment depends on the severity of the disease.

1. **Local applications to the skin (topical treatments)**
   
   - Strong steroid preparations or calcineurin inhibitors (tacrolimus) applied topically to the affected skin often help, especially with small ulcers, and may help to reduce the pain.

2. **Systemic treatments**
   
   - Oral treatments such as antibiotics (e.g. minocycline) or **dapsone** may be useful when treating small ulcers. Dapsone can affect the haemoglobin level in the blood. Blood tests are performed weekly to begin with, and patients are asked to report any unusual symptoms (sore throat, dizziness or faintness) urgently to their doctor. Dapsone also causes some patients to have headaches.
• **Steroid tablets** (e.g. prednisolone) are used to reduce inflammation. They may be used alone or in combination with other immunosuppressive agents. If taken for many months prednisolone may cause side effects including high blood pressure (hypertension) and high blood sugar (diabetes). Long-term oral steroid use can cause other side effects including bone thinning (osteoporosis). Your pharmacist may give you a card to carry if you have to take steroid tablets for a long time.

• Immunosuppressive medicines reduce the action of the body’s own defence system (the immune system). They are often used to make kidney, liver and heart transplants successful, but are also often useful to treat other severe skin conditions and severe pyoderma gangrenosum. Each one of these medicines has potential side effects and regular monitoring for side effects is an important part of your care.

• Immunosuppressive medicines include:
  - **Mycophenolate mofetil**
  - **Ciclosporin**
  - **Azathioprine** – See relevant Patient Information Leaflet.

In very severe cases your doctor may consider other stronger, immunosuppressive medicines including cyclophosphamide, intravenous steroids or immunoglobulins or biologic treatments.

**Where can I get more information about pyoderma gangrenosum?**

*Web links to detailed leaflets:*


For details of source materials used please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto: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*