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 ulcers. It is not related to gangrene. Pyoderma gangrenosum is not contagious and cannot be transferred from or to another person by touching or in any other way.

What causes pyoderma gangrenosum?

For about half of the people with pyoderma gangrenosum there are no known reasons for it. It may start after minor skin damage or injury. Sometimes other conditions may be associated with pyoderma gangrenosum, such as inflammatory bowel disease (IBD), arthritis or certain blood disorders. It is important to know that having pyoderma gangrenosum does not mean that you have these diseases.

What does pyoderma gangrenosum look like?

Pyoderma gangrenosum usually occurs in young and middle-aged adults but the way it looks can vary from person to person. It may start as a small pimple, red bump, pustule or blood-b blister. The skin then breaks down resulting in an ulcer which often oozes fluid. The ulcer can enlarge rapidly. The edge of the ulcer may look purplish. The most common places where pyoderma gangrenosum occurs are the legs, although it can be found anywhere on the body. 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?

In pyoderma gangrenosum, there is usually a single large ulcer but occasionally there may be multiple ulcers. Ulcers may become infected, oozing fluid or pus. Pain or discomfort are common symptoms. Pyoderma gangrenosum is not 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, inflammation of blood vessels, infection, injury, inflammatory disorders and cancer can look like pyoderma gangrenosum. This is why your doctor may take a sample of skin (biopsy) to examine under the microscope in a laboratory to confirm the diagnosis. The wound should also be swabbed and cultured for bacteria to rule out associated infection. Your doctor may also request blood tests to check for conditions that may be associated 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 treatable but may take some time to heal. More than one treatment may need to be tried; however skin grafts and surgery are not treatment options as this may result in enlargement of the ulcer.

Treatment may be divided into local treatment (topical), systemic and biologics depending upon 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**
   - Antibiotics (e.g.minocycline, dapsone) may be useful when treating small ulcers. Dapsone may affect the haemoglobin 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 immunosuppressive agents. Prednisolone side effects include high blood pressure (hypertension) and high blood sugar (diabetes). Long-term use is associated with bone thinning (osteoporosis). You will need to carry a card if you take steroid tablets for a long time.

• Immunosuppressive agents – these medicines reduce the action of the body’s own defence system (the immune system). They are used mainly to make kidney, liver and heart transplants successful, but are also useful in treating other severe skin conditions and severe pyoderma gangrenosum. Each one of these has certain side effects; monitoring for these are important aspects of your care. Immunosuppressive agents include:
  - **Mycophenolate mofetil**
  - **Ciclosporin**
  - **Azathioprine** – See relevant PIL.

If these medications are ineffective, your doctor may consider other potent immunosuppressive agents including cyclophosphamide, intravenous steroids and immunoglobulins and biologic medications.

**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: its contents, however, may occasionally differ from the advice given to you by your doctor.

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

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