



# 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 linked with it, what can be done about it, and where you can find out more about it.

## WHAT IS PYODERMA GANGRENOSUM?

Pyoderma gangrenosum (PG) is a rare but treatable condition. It causes an open wound on the skin, called an ulcer.

PG is part of a group of conditions called neutrophilic dermatoses. This means that neutrophils, a type of white blood cell, build up in an area of the skin. While 'gangrenosum' sounds like 'gangrene', it is not a type of gangrene, as this is caused by a loss of blood supply to an area of the body. This does not happen in PG.

PG is not contagious and cannot spread from person to person. It is also not a skin cancer and does not lead to cancer.

## WHAT CAUSES PYODERMA GANGRENOSUM?

In about half of people with PG there is no known cause. In some cases, it may start after damage to the skin. In other cases, people may have an underlying medical condition (for example, inflammatory bowel disease, arthritis, or certain blood disorders).

Rarely, PG can be linked with underlying cancers or can be triggered by medications. However, people with PG do not always have another condition. Your healthcare professional will do checks to rule out these conditions.

## WHAT DOES PYODERMA GANGRENOSUM LOOK AND FEEL LIKE?

PG can look different from person to person. It may start as a small pimple, red bump, pustule or blood-blister. The skin usually breaks down to form a painful ulcer that can get larger very quickly.

The edge of the ulcer may appear purple in colour in white skin tones. In brown or black skin, the colour may appear darker than the surrounding skin.

After the ulcer heals, a scar may form. This scar might look different from the surrounding skin - it could be darker, lighter, thinner, wrinkled, or have small dents.

PG most commonly appears on the legs, but it can also affect other parts of the skin. Sometimes it develops around a stoma (such as colostomy), or in a surgical wound.

There is usually a single large ulcer. Occasionally, there may be multiple ulcers. Ulcers may become infected, oozing fluid or pus. It is common for the ulcer to cause discomfort or pain.

PG does not usually come back, but it can, especially if the underlying health problem that caused it is not fully controlled.

## HOW IS PYODERMA GANGRENOSUM DIAGNOSED?

There is no single test that can confirm pyoderma gangrenosum. Instead, the diagnosis is based on:

- examining the skin (clinical assessment),
- ruling out other causes of skin ulcers,
- different tests to check for related conditions.



Your healthcare professional will need to rule out other possible conditions that can look like pyoderma gangrenosum. These can include:

- venous ulcers,
- inflammation of blood vessels,
- skin infection or injury,
- cancer

They may take a swab of the skin to check there is no infection. You may also be asked to give blood, urine and stool samples to check that you don't have other conditions that can be linked with PG.

Your healthcare professional may need to take a small sample of skin (biopsy) to be examined under the microscope in a laboratory. This test is helpful in ruling out other causes of skin ulceration. PG does not have a specific appearance under the microscope, but there can be many white blood cells (called neutrophils) in the area.

PG is not hereditary and is not passed from parent to child.

## HOW CAN PYODERMA GANGRENOSUM BE TREATED?

PG is often difficult to treat and may take some time to heal. You will remain under follow up until the condition is controlled. More than one treatment may need to be tried. Skin grafts and surgery are not treatment options as they often fail and may cause the ulcer to become bigger.

Treatment depends on the severity of the condition. If it is mild, it can be treated with topical creams or ointments, including corticosteroids and calcineurin inhibitors (such as tacrolimus). If it is more severe, it is often managed with medicines taken by mouth or by injection. Getting the condition under control as quickly as possible is important to prevent further damage to the affected skin.

Systemic treatments (taken by mouth or injected, they affect the whole body. Because

of this, they may have increased risk of side effects.

- Antibiotics such as tetracyclines or [dapsons](#).
- [Steroid tablets](#) (e.g. prednisolone). These work by reducing inflammation. They may be used alone or in combination with other agents.
- Immunosuppressive medicines such as [mycophenolate mofetil](#), [ciclosporin](#) or [azathioprine](#). These work by reducing your body's natural immune response which is involved in PG.
- Biologic injection therapies such as [infliximab](#), [adalimumab](#) and [ustekinumab](#) are increasingly used for patients with PG which is resistant to treatment. These work by blocking specific parts of the immune system.

In very severe cases or in cases which do not respond to other treatments, your healthcare professional may consider stronger, immunosuppressive medicines including cyclophosphamide, intravenous steroids or immunoglobulins. Combinations of immunosuppressants may also need to be tried in some cases. However, with these stronger medicines there may also be a higher risk of side effects.

## WHERE CAN I GET MORE INFORMATION ABOUT PYODERMA GANGRENOSUM?

Weblinks to other relevant sources:

DermNetNZ:

[www.dermnetnz.org/reactions/pyoderma-gangrenosum.html](http://www.dermnetnz.org/reactions/pyoderma-gangrenosum.html)

Jargon Buster:

[www.skinhealthinfo.org.uk/support-resources/jargon-buster/](http://www.skinhealthinfo.org.uk/support-resources/jargon-buster/)



*Please note that the British Association of Dermatologists (BAD) provides web links to additional resources to help people access a range of information about their treatment or skin condition. The views expressed in these external resources may not be shared by the BAD or its members. The BAD has no control of and does not endorse the content of external links.*

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.

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

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**BRITISH ASSOCIATION OF  
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