CONDITION

Pyogenic granuloma

A pyogenic granuloma is a benign skin or mouth growth that develops quickly and bleeds easily.

WHAT IT IS
Benign overgrowth of small blood vessels

BODY SYSTEM
Skin and mouth

MAIN SYMPTOMS
Red raised lump, rapid growth, easy bleeding, crusting

WHAT CAUSES IT
Usually unknown; hormones, injury, or medicines may contribute

HOW IT IS DIAGNOSED
Examination and biopsy with microscopic testing

MAIN TREATMENT
Removal or destruction of the growth

CAN IT BE CURED?
Yes - removal usually clears the lesion

IS IT AN EMERGENCY?
Sometimes - bleeding that will not stop

LONG-TERM OUTLOOK
Excellent, though the growth can return

Overview

A pyogenic granuloma is a small, non-cancerous growth made up of many tiny blood vessels. It usually appears on the skin, lips, gums, or inside the mouth. It can grow noticeably over days or weeks and may bleed after very minor contact.

Despite its name, a pyogenic granuloma is not caused by pus or a bacterial infection. It is also not a true granuloma, which is a particular type of inflammation seen under a microscope. Its medical name is lobular capillary haemangioma , meaning a clustered overgrowth of very small blood vessels.

The growth is often bright red when it first develops. It may become darker, crusted, or skin-coloured over time. Most are only a few millimetres to a couple of centimetres across, although size alone cannot confirm the diagnosis.

Pyogenic granulomas are benign, meaning they are not cancer and do not spread to other parts of the body. However, several other conditions can look similar. A new growth that develops quickly or bleeds repeatedly should therefore be assessed rather than diagnosed from appearance alone.

Symptoms

A pyogenic granuloma usually begins as a small bump that grows quickly. Its surface may be smooth, moist, crusted, or broken. Some growths sit on a narrow stalk, while others have a broad base.

Common features include:

Bleeding is common because the growth contains many fragile blood vessels. A small lesion can produce more blood than its size might suggest. It may also stain clothing or bedding if it is repeatedly disturbed.

The lump is usually painless. It can become tender if it is rubbed, injured, ulcerated, or located where it interferes with eating, walking, footwear, or daily activities.

Common sites include the fingers, hands, face, scalp, lips, gums, and tongue. During pregnancy, these growths often develop on the gums and are sometimes called "pregnancy tumours." This name does not mean cancer.

Growths around or beneath a nail can cause discomfort and may affect the nail's shape. A mouth lesion may make chewing, toothbrushing, or dental care difficult.

- A red, pink, purple, or dark raised lump
- Growth over several days or weeks
- Bleeding after light rubbing, shaving, or toothbrushing
- Crusting or a shallow sore on the surface

Causes and risk factors

The exact cause is often unknown. A pyogenic granuloma develops when small blood vessels and surrounding tissue grow more than expected in one area.

Minor injury or repeated irritation may contribute in some cases. Examples include rubbing from footwear, shaving, picking at the skin, dental plaque, a sharp tooth, or irritation around a piercing. Many people do not remember any injury before the growth appeared.

Hormonal changes are another recognised factor. Pyogenic granulomas can occur during pregnancy, especially on the gums. Some shrink after pregnancy, although others remain or continue to bleed.

Certain medicines have also been linked with these growths. These include some retinoids, cancer treatments, immune-modifying medicines, and drugs that affect blood vessel growth. The connection is not present in every case, and a growth may have another explanation.

Do not stop a prescribed medicine because you develop a skin or mouth lump. The medicine and the lump should be reviewed together so that the benefits and risks can be considered safely.

Pyogenic granulomas can affect children and adults. They are not contagious, and they cannot be passed through touch, blood, food, or shared objects.

Diagnosis

A healthcare professional may suspect a pyogenic granuloma from its appearance, rapid growth, and tendency to bleed. They will usually ask when it started, how quickly it changed, whether it has been injured, and whether you are pregnant or taking relevant medicines.

A handheld magnifying instrument called a dermoscope may be used to examine blood vessel patterns beneath the surface. Mouth lesions may be assessed by a dentist, oral medicine specialist, or oral surgeon.

Appearance alone is not always enough. Skin cancers, unusual moles, warts, other blood vessel growths, and some infections can resemble a pyogenic granuloma. A biopsy may therefore be recommended, particularly when the diagnosis is uncertain or the growth has unusual features.

During a biopsy, some or all of the growth is removed after the area is numbed. A laboratory then examines the tissue under a microscope. This can confirm the characteristic arrangement of small blood vessels and rule out conditions that need different care.

If a removed growth is sent for laboratory testing, follow up for the result even if the area appears to have healed.

Treatment and management

Treatment is often recommended when the growth bleeds repeatedly, catches on clothing, causes pain, interferes with eating or movement, or needs to be examined under a microscope.

Procedural treatments include:

The most suitable method is influenced by the growth's size, depth, and location, as well as the importance of limiting scarring. Complete surgical removal can provide a full tissue sample and may reduce recurrence, but it usually leaves a scar. Less invasive treatments may heal more quickly but can require repeat treatment.

Local anaesthetic is commonly used to numb the area during removal. The wound may ooze or bleed for a short time afterward. Follow the specific wound-care instructions you receive, including how to manage dressings and when to return for results.

Certain medicines applied to the growth are sometimes used in selected cases, particularly for children, awkward locations, or multiple lesions. These treatments are not appropriate for every growth and may take longer than a procedure. They should only be used after the diagnosis and treatment plan have been reviewed.

A small pregnancy-related growth may be monitored if it is not causing problems because some shrink after childbirth. Treatment may still be needed for frequent bleeding, difficulty eating, or uncertainty about the diagnosis.

For a growth inside the mouth, care may also include dealing with local irritation, such as plaque, an ill-fitting dental appliance, or a rough tooth edge. Removing irritation does not always make an established growth disappear, so a separate procedure may still be needed.

- Scraping away the growth and sealing its base with heat
- Shaving off the raised part and treating the remaining tissue
- Cutting out the whole growth, sometimes with stitches
- Laser treatment, freezing, or another method that destroys the tissue

Complications

Repeated bleeding is the main complication. Most bleeding is minor, but it can be inconvenient and difficult to control if the growth is repeatedly knocked. Significant blood loss and anaemia are unusual but may occur with frequent or prolonged bleeding.

The surface can break down and form an ulcer. Secondary infection is uncommon, but increasing pain, warmth, swelling, pus, or spreading redness should be assessed.

A pyogenic granuloma can return after treatment. Recurrence is more likely if some of the growth remains or if ongoing irritation is present. A new lump in the same place should be re-examined rather than assumed to be another pyogenic granuloma.

Removal may leave a scar or a lasting change in skin colour. Procedures close to a nail can sometimes affect nail growth. Your clinician can explain the likely cosmetic result before

treatment.

The most important diagnostic concern is mistaking another condition for a pyogenic granuloma. Microscopic examination of removed tissue helps reduce this risk.

Prevention

There is no reliable way to prevent most pyogenic granulomas because their cause is usually unclear.

Protecting a frequently injured area and avoiding picking at an existing bump may reduce bleeding, but it may not stop the growth from developing. Good dental care can reduce gum irritation, although pregnancy-related mouth lesions are not always preventable.

If a prescribed medicine may be contributing, treatment decisions need to account for why you take it. Do not reduce or stop the medicine on your own.

A pyogenic granuloma is not caused by poor hygiene and is not something you can catch from another person.

Living with it and what to expect

A pyogenic granuloma often grows quickly at first and then stays at a similar size. It may continue to bleed whenever its delicate surface is disturbed. It does not usually spread across the body or turn into cancer.

Some growths shrink without treatment, especially those associated with pregnancy, but many persist. Waiting may be reasonable for a confirmed, symptom-free growth in certain situations. A growth that repeatedly bleeds or remains uncertain usually needs further assessment.

After treatment, the area generally heals over days to weeks, depending on its size, location, and the procedure used. There may be temporary tenderness, a scab, or a small amount of drainage. Scarring can remain after the wound has fully healed.

Most people return to their usual activities with little long-term effect. A growth on the hand, foot, mouth, or near a nail may temporarily affect work, exercise, eating, or personal care while it heals.

Recurrence does not mean the growth has become cancerous. It may mean that blood vessel tissue remained at the base or that the area continues to be irritated. Repeat examination, another biopsy, or a different removal method may be appropriate.

When to get medical help

Arrange a routine appointment for a new lump that grows quickly, bleeds easily, repeatedly crusts, or does not heal. Assessment is also important if a previously diagnosed growth changes significantly or returns after treatment.

Seek prompt medical advice if:

If the growth bleeds, apply firm, continuous pressure with clean gauze or cloth. Avoid repeatedly lifting it to check, because this can disturb the forming clot.

Seek urgent medical care if bleeding does not stop with firm pressure, is heavy, or makes you feel faint or weak. Call emergency services for severe uncontrolled bleeding, collapse, or difficulty breathing. These situations are uncommon.

- Bleeding keeps restarting or is becoming more frequent
- The area develops increasing pain, swelling, pus, or spreading redness
- A mouth lesion interferes with eating, swallowing, or dental care
- The growth is beneath a nail or is changing the nail
- You develop several similar growths, especially after starting a medicine

Common questions

Is a pyogenic granuloma cancer?

No. A true pyogenic granuloma is a benign blood vessel growth and does not turn into cancer. However, some cancers and other skin conditions can look similar. This is why a rapidly growing or repeatedly bleeding lump may need a biopsy.

Will a pyogenic granuloma go away on its own?

Some shrink, particularly those that develop during pregnancy. Many remain and continue to bleed when disturbed. Whether observation is suitable depends on how certain the diagnosis is, where the growth is, and whether it is causing problems.

Can I pop or cut it off myself?

No. The growth has a rich blood supply and can bleed heavily if cut, punctured, or tied off. Home removal also leaves no tissue for laboratory testing and may increase the risk of infection, scarring, or incomplete treatment.

Why does such a small bump bleed so much?

It contains many tiny blood vessels close to a fragile surface. Light rubbing can break these

vessels. Firm, uninterrupted pressure is more effective than wiping away the blood or checking the area repeatedly.

Can a pyogenic granuloma come back after removal?

Yes. It can return if part of the growth remains or the area continues to be irritated. A returning lump should be checked again because other conditions can resemble it.

Is a pyogenic granuloma contagious?

No. It is not an infection and cannot spread from one person to another. Touching it will not give someone else the condition, although touching or picking it may trigger bleeding.

Sources

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