CONDITION

Subareolar abscess

A subareolar abscess is a painful pocket of infected fluid beneath or beside the nipple.

WHAT IT IS
Pus-filled infection beneath or beside the nipple

BODY SYSTEM
Breasts and skin

MAIN SYMPTOMS
Painful lump, redness, swelling, pus drainage

WHAT CAUSES IT
Blocked inflamed milk ducts with bacterial infection

HOW IT IS DIAGNOSED
Ultrasound and testing drained fluid

MAIN TREATMENT
Antibiotics, drainage, and sometimes duct surgery

CAN IT BE CURED?
Sometimes - affected ducts can be removed

IS IT AN EMERGENCY?
Sometimes, with confusion or breathing difficulty

LONG-TERM OUTLOOK
Usually good, but recurrence and fistulas can occur

Overview

A subareolar abscess is a pocket of pus beneath or close to the areola, the darker skin around the nipple. Pus is a collection of fluid, bacteria, and immune cells produced during an infection.

Most subareolar abscesses are linked to inflammation and blockage of the small milk ducts behind the nipple. This is called periductal mastitis . "Periductal" means around a milk duct, while "mastitis" means breast inflammation.

The condition most often occurs outside pregnancy and breastfeeding. It can affect people of any sex, although it is much more common in women. An abscess can also develop during breastfeeding, but breastfeeding-related abscesses are often located farther from the nipple.

A subareolar abscess is not breast cancer. However, some breast conditions can cause similar symptoms. A new breast lump, ongoing inflammation, or symptoms that do not improve should

therefore be properly assessed.

Treatment usually involves draining the infected fluid and using antibiotics like amoxicillin or doxycycline when appropriate. Some people have only one episode. Others develop repeated abscesses because the affected duct remains blocked or damaged.

Symptoms

Symptoms usually affect one breast. They may develop over several days or return in the same area after an earlier infection.

Common symptoms include:

The lump may feel firm at first. It can become softer as fluid collects. If the abscess opens through the skin, it may leave a small draining hole near the edge of the areola.

A persistent channel between a milk duct and the skin is called a mammary duct fistula . It may repeatedly leak fluid, close for a while, and then reopen.

Redness can be less noticeable on brown or black skin. Warmth, swelling, pain, and changes in skin texture may be easier to recognise.

- A painful lump beneath or next to the nipple
- Red, warm, or swollen skin around the areola
- Tenderness that makes clothing or touch uncomfortable
- Pus or blood-stained fluid draining near the nipple
- A nipple that becomes pulled inward
- Fever or feeling generally unwell

Causes and risk factors

A subareolar abscess usually starts with changes inside a milk duct. The normal lining can be replaced by skin-like cells that shed keratin, the material found in the outer layer of skin. This material can plug the duct.

The blocked duct may stretch, rupture, and trigger inflammation. Bacteria can then enter and form an abscess. More than one type of bacteria may be involved, particularly when an abscess has returned several times.

Smoking is strongly associated with periductal mastitis and recurrent subareolar abscesses. Tobacco smoke may damage the duct lining and reduce the breast tissue's ability to heal. This

association does not mean that everyone who smokes will develop an abscess, or that smoking is the only cause.

Other factors linked with breast abscesses include:

Some people have no clear risk factor. The condition is not caused by poor personal hygiene.

- A previous abscess or surgery in the same area
- Diabetes, especially when blood glucose is difficult to control
- A nipple piercing, particularly if the area becomes infected
- Conditions or treatments that weaken the immune system
- Recent breastfeeding or milk remaining in the breast

Diagnosis

A healthcare professional will ask when the symptoms started, whether there has been drainage, and whether you have had similar problems before. They will examine the nipple, areola, surrounding breast, and lymph nodes under the arm.

An ultrasound is commonly used to look beneath the skin. It can show whether there is a pocket of fluid and help distinguish an abscess from inflammation without a drainable collection.

Fluid may be removed using a needle or through a small opening. Seeing pus supports the diagnosis. A sample is often sent to a laboratory to identify the bacteria and determine which antibiotics are likely to work. Testing is especially useful for a recurrent infection or one that has not improved with initial treatment.

Depending on your age, symptoms, and breast history, further imaging may be arranged after the painful inflammation has settled. A mammogram uses low-dose X-rays to examine breast tissue. It is not always needed during the most painful stage.

A biopsy, which removes a small tissue sample, is not routine for every abscess. It may be recommended when a lump or skin change persists, the diagnosis is uncertain, or treatment is not working as expected. This helps rule out other causes of breast inflammation.

Treatment and management

An established abscess usually needs the pus to be drained. Antibiotics alone may not reach the centre of a closed fluid collection well enough to clear it.

Drainage may be performed with a needle, often guided by ultrasound. More than one aspiration may be needed. A larger abscess, thick pus, several separate pockets, or damaged overlying skin may require a small incision so the fluid can drain.

Antibiotics may be used alongside drainage. The choice is based on factors such as the likely bacteria, local resistance patterns, allergies, pregnancy or breastfeeding, and laboratory results. Complete the prescribed course unless the prescribing professional tells you to stop or change it.

Pain relief and a supportive, well-fitting bra may make recovery more comfortable. A clean dressing can absorb drainage and protect clothing. Avoid squeezing or trying to puncture the lump, as this may spread infection or damage tissue.

If episodes keep returning, a breast surgeon may discuss removing the affected duct and any fistula. This is usually considered after the active infection has settled. Surgery aims to remove the source of repeated blockage, although no procedure can guarantee that an abscess will never recur.

If you smoke, support to stop can be an important part of management. Stopping may reduce ongoing duct damage and improve wound healing.

People who are breastfeeding may often continue feeding or expressing milk, but the safest approach depends on the abscess location, drainage site, medicines, and comfort. Personal advice from the maternity or breast care team is important.

Complications

A treated subareolar abscess often heals, but complications are possible.

The most common problem is recurrence. The infection may settle while the abnormal or blocked duct remains, allowing another abscess to form in the same place.

A mammary duct fistula can develop after the abscess drains naturally or is opened. This channel may cause repeated discharge and skin irritation. It sometimes needs surgery.

Other possible complications include:

Prompt assessment and drainage can limit tissue damage. Diabetes, smoking, or reduced immune function may make healing slower.

- Scarring or a change in the shape of the nipple
- Persistent nipple inversion
- Cellulitis, an infection spreading through the skin

- Delayed wound healing
- Sepsis, an uncommon but serious whole-body response to infection

Prevention

Subareolar abscesses cannot always be prevented. Some people develop duct blockage and inflammation without an avoidable cause.

Not smoking, or getting support to stop, may reduce the risk of recurrence. Good diabetes management can also support the immune system and wound healing.

Keep a nipple piercing clean and seek advice if it becomes painful, swollen, or starts producing pus. Removing jewellery during an active infection should be discussed with a healthcare professional because the opening can close and trap infected fluid.

After an abscess, attend planned follow-up and report renewed pain or swelling early. Early inflammation may be easier to manage before a large collection forms.

Living with it and what to expect

Pain and pressure often begin to improve after effective drainage. Redness and tenderness may take several days to settle, while the wound or drainage opening can take longer to close. Follow-up may include another examination, repeat ultrasound, dressing care, or review of culture results.

Some people recover after one episode and have no further problems. Others experience repeated inflammation over months or years. Recurrence is more likely when a damaged duct or fistula remains beneath the nipple.

Repeated episodes can be frustrating and may affect sleep, exercise, intimacy, or confidence about breast appearance. Drainage and dressings can also interfere with work and daily routines. Tell your care team if pain or worry is making normal activities difficult.

If surgery is needed, healing time depends on the extent of the procedure and whether infection is still present. Surgery may leave a scar or alter nipple shape or sensation. It can reduce recurrence when the affected duct and fistula are removed, but future inflammation is still possible.

A lump or skin change should not simply be assumed to be another abscess. New, persistent, or different symptoms need reassessment.

When to get medical help

Arrange an urgent or same-day assessment if you develop a painful breast lump with warmth, redness, swelling, or pus. You should also seek prompt care if you have a fever, feel increasingly unwell, or have symptoms that are rapidly worsening.

Contact the treating service promptly if:

Call emergency services if breast infection is accompanied by confusion, fainting, severe breathing difficulty, blue or mottled skin, or extreme drowsiness. These can be signs of a severe body-wide response to infection.

Routine follow-up is important if a lump remains after treatment, an opening continues to drain, or abscesses keep returning. Persistent nipple inversion, unexplained bleeding, or a lasting skin change should also be assessed, even when there is little pain.

- Pain or swelling worsens after drainage
- Drainage stops but the lump becomes larger
- Fever develops or returns
- Antibiotics are not leading to improvement
- The wound has a bad smell or increasing discharge

Common questions

Is a subareolar abscess breast cancer?

No. It is an inflammatory and infectious condition, not cancer. However, breast cancer and other conditions can occasionally resemble an infection. Persistent symptoms, an unexplained lump, or inflammation that does not respond to treatment may need imaging or a biopsy.

Can a subareolar abscess go away on its own?

A small area of inflammation may settle, but an established pocket of pus often needs drainage. Waiting can allow the abscess to enlarge or open through the skin. A painful, warm, swollen breast lump should be assessed rather than squeezed at home.

Why does my breast abscess keep coming back?

Repeated abscesses often mean that a duct behind the nipple remains blocked or damaged. A fistula may also keep bacteria connected to the skin. Smoking, diabetes, and previous infection can contribute. Recurrent disease may need assessment by a breast surgeon.

Will antibiotics cure a subareolar abscess?

Antibiotics can treat bacteria in the surrounding tissue, but they may not clear a closed pocket of pus. Drainage is often the key treatment. Laboratory testing of the fluid can help guide antibiotic choice when infection is recurrent or slow to improve.

Is a subareolar abscess contagious?

The condition itself is not passed from person to person. Draining pus can contain bacteria, so wash your hands after changing dressings, avoid sharing towels, and keep the area covered with a clean dressing when advised.

Can I breastfeed with a subareolar abscess?

Many people can continue breastfeeding or expressing milk during treatment. The decision may be affected by pain, the drainage opening's position, and the medicines being used. Get individual guidance before feeding from a breast with an open wound close to the nipple.

Sources

- National Health Service. Breast abscess . Overview of symptoms, diagnosis, drainage, antibiotics, and urgent assessment.
- Boakes E, Woods A, Johnson N, Kadoglou N. Breast infection: a review of diagnosis and management practices . European Journal of Breast Health . 2018;14(3):136-143.
- Toomey AE, Le JK. Breast Abscess . StatPearls . National Center for Biotechnology Information.
- Pesce C, Yao K. Abscess/infections/periareolar mastitis . Annals of Breast Surgery . 2021.
- Bharat A, Gao F, Aft RL, Gillanders WE, Eberlein TJ, Margenthaler JA. Predictors of primary breast abscesses and recurrence . World Journal of Surgery . 2009;33(12):2582-2586.