CONDITION

Carbuncle

Learn how to recognize a carbuncle, what causes this cluster of skin boils, and when drainage, antibiotics, or urgent medical care may be needed.

WHAT IT IS
Cluster of connected infected boils

BODY SYSTEM
Skin

MAIN SYMPTOMS
Painful swollen lumps, warmth, tenderness, pus drainage

WHAT CAUSES IT
Staph bacterial infection

HOW IT IS DIAGNOSED
Skin examination, pus culture

MAIN TREATMENT
Incision and drainage, sometimes antibiotics

CAN IT BE CURED?
Yes, most improve with appropriate treatment

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

LONG-TERM OUTLOOK
Most improve, but scarring or serious spread can occur

Overview

A carbuncle is a cluster of connected boils caused by an infection around several hair follicles. A boil, also called a furuncle, is a painful lump that contains pus. In a carbuncle, nearby boils join beneath the skin and may drain through several openings.

Carbuncles are usually caused by Staphylococcus aureus , a type of bacteria often called "staph." Some staph bacteria can resist commonly used antibiotics like amoxicillin or doxycycline . These are known as methicillin-resistant Staphylococcus aureus , or MRSA.

A carbuncle can occur anywhere hair grows, but it is often found on the back of the neck, shoulders, back, buttocks, or thighs. Friction, sweating, and pressure may contribute to infection in these areas.

Carbuncles tend to be larger, deeper, and more painful than single boils. They may also be more likely to cause fever, scarring, or infection in nearby tissue. Many require evaluation by a healthcare professional. The main treatment is often a procedure to drain the pus safely. Antibiotics are needed in some situations, but they do not replace drainage when a significant pocket of pus is present.

Symptoms

A carbuncle usually begins as one or more tender, red or darker-colored bumps. The area may enlarge over several days as pus collects under the skin.

Possible symptoms include:

Redness may be less noticeable on brown or black skin. Warmth, swelling, pain, drainage, or a change from the person's usual skin color may be more helpful signs.

A carbuncle can resemble an inflamed cyst, an infected insect bite, or another type of abscess. An abscess is a closed pocket of pus. A healthcare professional can assess the area and determine whether it needs drainage or another form of treatment.

Seek urgent medical care if the lump is on the face, especially near the eyes, nose, or upper lip; is growing quickly; is extremely painful; or is surrounded by spreading redness. Prompt assessment is also important for fever, chills, red streaks, repeated vomiting, or worsening illness.

People with diabetes, reduced immune function, poor circulation, or a history of serious skin infections should contact a healthcare professional early rather than waiting for the area to drain on its own.

Call emergency services for confusion, fainting, severe weakness, difficulty breathing, bluish or mottled skin, or other signs of severe illness. These symptoms may indicate a serious body-wide response to infection.

- A painful, swollen lump or group of connected lumps
- Warmth and tenderness around the affected skin
- Pus draining through one or more openings
- A yellow or white center
- Crusting after fluid drains
- Redness or a deep red, purple, or gray appearance, depending on skin tone
- Fever, chills, tiredness, or a general feeling of illness

- Swollen lymph nodes near the infection

Causes and risk factors

Most carbuncles develop when staph bacteria enter a hair follicle or a small break in the skin. Staph can live on the skin or inside the nose without causing illness. Infection may occur after shaving, scratching, friction, or another minor injury disrupts the skin barrier.

Pus forms as the immune system responds to the bacteria. When infection spreads between nearby follicles under the skin, several boils can connect and form a carbuncle.

Factors that may increase the chance of developing a carbuncle include:

A carbuncle is not simply caused by poor hygiene. However, bacteria can spread through contact with pus, contaminated hands, or shared personal items. Covering drainage and washing hands can help protect other people.

Repeated abscesses may have several explanations. These include ongoing staph carriage, close contact with another person who carries the bacteria, or a local problem such as hidradenitis suppurativa. Hidradenitis suppurativa is a long-term inflammatory condition that causes recurring painful lumps, often in the armpits or groin. Recurrent lumps should be assessed rather than assumed to be carbuncles.

- Close contact with someone who has a boil, carbuncle, or draining MRSA infection
- Sharing towels, razors, clothing, bedding, or sports equipment
- Crowded living conditions or activities involving close skin contact
- Frequent sweating, friction, shaving, or skin injury
- Eczema or another condition that weakens the skin barrier
- Diabetes, especially when blood glucose is not well controlled
- Poor circulation
- Reduced immune function due to illness or medical treatment
- Previous boils, carbuncles, or MRSA infections
- Injection drug use

Diagnosis

A healthcare professional can often identify a carbuncle by examining the skin and asking how

the lump developed. They may check its size, depth, tenderness, drainage, and surrounding redness. They may also ask about fever, previous infections, recent antibiotics, medical conditions, and possible exposure to MRSA.

If pus is available, a sample may be sent to a laboratory for culture. A culture identifies the bacteria and can show which antibiotics are likely to work. It may be especially useful for severe, recurrent, unusual, or treatment-resistant infections.

Blood tests are not needed for every carbuncle. They may be considered if there are signs of a more extensive infection or concerns about immune function or blood glucose. Blood cultures may be used when a bloodstream infection is suspected.

Imaging is uncommon for a straightforward skin abscess. Ultrasound or another scan may be used if the diagnosis is uncertain, the infection appears unusually deep, or a pocket of pus cannot be found during examination.

Treatment and management

Treatment depends on the carbuncle's size, location, depth, drainage, and effect on overall health. A clinician will also consider age, immune function, diabetes, previous infections, and local patterns of antibiotic resistance.

For a small boil that has not become a large or deep carbuncle, a warm, moist compress may encourage natural drainage. It can be applied for short periods several times a day using clean material. The area should not be squeezed, punctured, cut, or "popped." Doing so can push infection deeper, spread bacteria, and damage nearby tissue.

Large, deep, painful, or persistent carbuncles often need incision and drainage. During this procedure, a clinician makes a small opening so pus can escape. The area may be numbed first. The clinician may rinse the cavity and sometimes place packing material or a small drain, depending on the wound.

Antibiotics may be prescribed when there is spreading cellulitis, fever or other whole-body symptoms, reduced immune function, multiple abscesses, treatment failure, or another factor that raises the risk of complications. Cellulitis is an infection of the deeper layers of skin that causes spreading warmth, swelling, and redness or discoloration.

The choice of antibiotic depends on the likely bacteria, local resistance, culture findings, allergies, and the person's medical history. Patients should take prescribed medicine as directed and contact the prescriber if symptoms worsen or side effects occur. Leftover or shared antibiotics should not be used.

Home care after evaluation may include:

Routine use of antiseptics, bleach baths, or antibiotic ointments is not appropriate for every carbuncle. For repeated staph infections, a clinician may consider a targeted decolonization plan to reduce bacteria on the skin or in the nose. This should be medically directed because recurrence can have other causes and treatment plans vary.

- Keeping the area covered with a clean, dry dressing
- Changing the dressing when it becomes wet or soiled
- Washing hands before and after wound care
- Placing used dressings in a sealed bag before disposal
- Avoiding shared towels, razors, clothing, and bedding
- Laundering items that touch drainage according to their care instructions
- Avoiding swimming, contact sports, and shared gym equipment while the wound is draining
- Using nonprescription pain medicine only if it is safe based on personal health conditions and other medicines

Complications

Most carbuncles improve with appropriate drainage, wound care, and antibiotics when indicated. Healing can take time because the infection extends below the skin surface.

Possible complications include cellulitis, a larger or deeper abscess, and permanent scarring. Dark or light marks may remain after inflammation settles, particularly in people whose skin develops noticeable pigment changes after injury.

Less commonly, bacteria can spread into the blood, bones, joints, or other tissues. A bloodstream infection can lead to sepsis, a dangerous reaction to infection that affects the whole body. This risk is higher when treatment is delayed or when a person has reduced immune defenses.

A wound that continues to enlarge, remains very painful, develops new drainage, or does not improve after treatment needs reassessment. Persistent symptoms may mean that more pus remains, the bacteria resist the antibiotic, or the lump has a different cause.

Follow up

Follow-up needs depend on how the carbuncle was treated. After incision and drainage, a

clinician may arrange a wound check to remove or replace packing, review culture results, and confirm that swelling and pain are improving.

Some drainage can continue during healing. The overall trend should be toward less pain, swelling, and discharge. Follow the wound-care instructions provided by the treating clinician.

Contact the healthcare team promptly if:

Hives, swelling of the face or throat, or trouble breathing after medicine requires emergency care.

A routine appointment is appropriate for repeated boils or carbuncles, slow healing, or a wound that keeps returning in the same place. The clinician may look for staph carriage, diabetes, hidradenitis suppurativa, an underlying cyst, or another contributing condition.

- Fever develops or returns
- Pain, warmth, swelling, or discoloration is increasing
- Redness or discoloration spreads beyond the original area
- New lumps appear nearby
- Drainage develops a worsening odor or increases suddenly
- The wound does not begin to improve after treatment
- A prescribed antibiotic causes a concerning reaction

Sources

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