

# Abscess

**Abscess** (archaically tubercle) is a technical term for a cavity filled with pus. It is a consequence of **purulent infectious diseases**. It can be painful, difficult to treat with conservative (i.e. non-surgical) means, and the infection from it can spread throughout the body, causing sepsis. Skin abscesses are referred to as **furuncles** and **carbuncles**.

Surgeons use the Latin proverb *Ubi pus, ibi evacua*, which can be translated as *Where there is pus, drain it there*.

## Causes

Abscesses are mainly associated with **purulent bacterial infections**. Abscesses of fungal origin are no exception, and there are also abscesses caused by **protozoa** (e.g. amoebic abscesses). Intravenous drug addicts are a particularly vulnerable group of people. Several factors lead to this - frequent needle injections into the tissues, a generally low level of hygiene and impaired immune system function in a drug - ravaged organism.

## Abscess formation

An abscess is formed if the bacterium gets into our tissues and organs, and a purulent inflammation occurs there. **The contents of an abscess** is a foul-smelling cloudy liquid that contains dead and living microorganisms, white blood cells, dead tissue remains, etc. If the organism is not able to deal with the infection quickly, a space filled with pus - an abscess - will form in a given part of the body. On the one hand, an abscess indicates the inability of the immune system to destroy the infection, on the other hand, it indicates the ability to at least limit the inflammation.

**3 situations** can follow the formation of an abscess:

1. Restitutio ad integrum.
2. Formation of a **fistula**. After emptying, the abscess and fistula usually heal, but sometimes they may persist.
3. The infection can spread uncontrollably into the surrounding tissue. Such unbounded tissue infection is referred to as **phlegmona**. Then the bacteria can spread into the blood and very dangerous blood poisoning (**sepsis**) will occur.



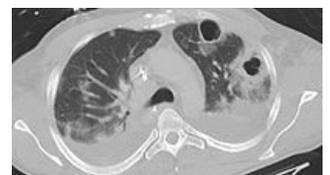
Skin abscess caused by Methicillin-resistant *Staphylococcus aureus* (MRSA)

## Clinical signs

An abscess can occur practically anywhere in the body (under the skin, in the muscles, in the liver, in the lungs, in the kidneys, in the brain, etc.). If it is right under the skin, it appears as a lump, the skin above it is red and warm. The abscess is **painful** and people usually have high **fevers**. A deep-seated abscess cannot be seen, it is manifested by pain, high temperature and various disorders of the organ or tissue affected by the abscess.

## Treatment

**Surgery** is an effective treatment method. If possible, the abscess is surgically opened and the pus drained. **Drainage** is sometimes used for longer-term cleaning. Drainage means that a tube is inserted into the abscess space through which the pus can drain. If the drainage of pus is ensured, the abscess gradually clears and heals.



CT Pneumonia with abscesses, caverns and effusions

## Links

### Related Articles

- Necrosis
- Inflammation
- Sepsis
- Exudative interstitial inflammations

### Source

- ŠTEFÁNEK, Jiří. *Medicína, nemoci, studium na 1. LF UK* [online]. ©2008. [cit. 31.3.2011]. <<https://www.stefajir.cz/index.php?q=absces>>.

