



## TONSILLITIS

### What are the tonsils?

There are several types of tonsils.

- Palatine tonsils – located on the right and left sides of the upper throat (oropharynx); these are the tonsils usually responsible for tonsillitis and are removed in a tonsillectomy
- Lingual tonsils – located at the base of the tongue
- Pharyngeal tonsil (adenoid) – located along the back wall of the uppermost part of the throat (nasopharynx); these tonsils are essentially located in the back of the nose and are removed in an adenoidectomy

### What do the tonsils do?

The exact role of the tonsils in the body's immune system is still being researched. It is thought that the tonsils play a part in fighting disease during early life. Studies have shown that the tonsils contain disease-killing cells called natural killer cells and have white blood cells that differentiate into antibody-secreting cells. Interestingly, people without tonsils and adenoids have not been shown to have compromised immune systems.

### What is tonsillitis and what causes it?

Tonsillitis is the term for inflammation of the tonsil, and it is most often result in a infection. Pharyngitis is inflammation of the surrounding throat (call the pharynx) and often occurs at the same time. Symptoms of tonsillitis include fever, chills, sore throat and pain with swallowing.

Acute tonsillitis can be caused by both viruses (e.g. influenza, rhinovirus, "mono") and bacteria (e.g. "Strep", "Staph"). Generally, younger preschool-aged children tend to get viral tonsillitis, and older children and adults tend to get bacterial infections. Viral infection can lead to bacterial infection.

### How is tonsillitis treated?

Tonsillitis is treated differently whether it is viral or bacterial.

- Viral infections are treated with supportive measures including increased fluid intake, anti-inflammatory medications (e.g. NSAIDs like ibuprofen), and gentle salt-water gargles/rinses. Viral infections are not improved by antibiotics, and unnecessary use of antibiotics for viral infections may contribute to antibiotic resistance.

- Bacterial infections are treated with antibiotics (e.g. penicillin).

Very severe infections that lead to inability to swallow may require hospitalization and are best treated with intravenous fluid and intravenous antibiotics.

### **What can happen if tonsillitis is not effectively treated?**

Tonsillitis can lead to a very severe condition called peritonsillar abscess. An abscess is a collection of pus caused by tissue death and breakdown of the white blood cells fighting the infection. The swelling from an abscess can interfere with breathing and must be drained. Relatively small or contained abscesses can be aspirated with a needle or incised and drained via a small incision, using a local anesthetic. More severe abscesses may require a general anesthetic and incision and drainage in the operating room. If not addressed, the infection can spread into the deep neck and chest, which can be fatal. For these reasons, it is important that tonsillitis be treated under the guidance of a health care professional.

### **What causes repeated tonsillar infections?**

A persistent tonsillar infection can lead to enlargement of the tonsils and a condition known as chronic tonsillitis. Despite antibiotic treatment, the tonsils can remain infected. The tonsils can also trap food particles in small infoldings called crypts, which prolongs the infection.

### **What is a tonsillectomy, and when should it be performed?**

Tonsillectomy is the surgical removal of the tonsils under general anesthesia using special instruments to dissect the tonsil off its adjacent throat tissue. As a treatment for chronic tonsillitis, tonsillectomy is performed when medicine, supportive measures, and other non-surgical treatments are not effective. General guidelines have shown that individuals with 7 infections in 1 year, 5 infections in 2 consecutive years, or 3 infections in 3 consecutive years would likely benefit from a tonsillectomy. In some cases, a tonsillectomy must be done on a near-emergency basis. This occurs if the tonsils are so large that they block breathing. A tonsillectomy is also recommended for individuals with just one enlarged tonsil to biopsy the tissue.