Tonsil stones (tonsilloliths)

Patient Information



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Overview

Tonsil stones, also known as tonsilloliths, are small, usually hard, white or yellow deposits that form in the natural crevices and pits (called crypts) of your tonsils. The tonsils are two gland-like structures located at the back of your throat, one on each side. They are part of your immune system, helping to trap germs that enter through your mouth.

Tonsil stones occur when debris, such as dead cells, mucus, food particles, and bacteria, gets trapped in the tonsil crypts and hardens or calcifies. They are quite common, especially in adults and are often harmless. Many people have them without even knowing. However, sometimes they can cause bothersome symptoms. They are not cancerous and are not usually a sign of serious illness.

Symptoms and Causes

Many tonsil stones cause no symptoms at all. When symptoms do occur, they may include:

- Bad breath (halitosis): This is one of the most common symptoms, caused by the bacteria within the stone.
- Sore throat: Mild discomfort or irritation in the throat.
- Feeling of something stuck: A sensation that something is lodged in the back of the throat.
- Visible stones: You might see small white or yellow spots on your tonsils.
- Difficulty or pain when swallowing.
- Persistent cough.
- Earache: Pain can sometimes be referred to the ear from the throat area.
- Swollen tonsils.
- **Throat infections:** Occasionally, they may contribute to recurrent tonsil infections, although they are not typically associated with acute tonsillitis.

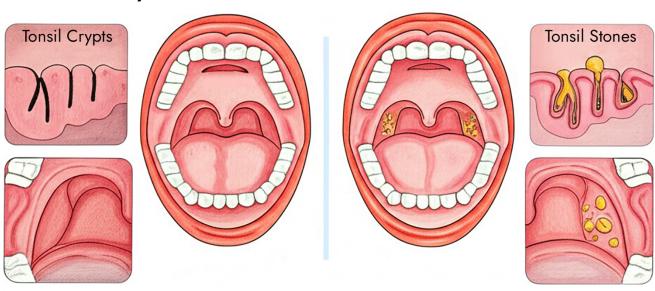
Causes and Risk Factors:

Tonsil stones form due to the accumulation and calcification of debris in the tonsil crypts. Factors that may increase your risk include:

- **Tonsil structure:** Having large tonsils or tonsils with deep, irregular crypts provides more places for debris to get trapped.
- Chronic tonsillitis: Repeated inflammation of the tonsils.
- **Poor oral hygiene:** Allows more bacteria and debris to accumulate, although stones can still form even with excellent hygiene.
- Chronic sinus problems or post-nasal drip (catarrh): Increased mucus production can contribute to debris build-up.
- Smoking.
- Dry mouth.

Healthy Tonsils

Tonsil Stones



Diagnosis and Investigations

Tonsil stones are usually diagnosed based on your symptoms and a simple examination of your throat by a doctor or dentist. They can often be seen directly on the tonsils.

No special tests are typically required. Occasionally, larger tonsil stones might be discovered incidentally on dental X-rays or scans (like CT or MRI) performed for other reasons.

Management and Treatment

Many tonsil stones require no treatment, especially if they aren't causing symptoms, and they may dislodge on their own. If they are bothersome, several management options exist:

1. Home Care / Self-Management:

- **Gargling:** Regular gargling with warm salt water (dissolve half to one teaspoon of salt in a glass of warm water) can help dislodge stones and soothe the throat. Gargle after meals and before
- Oral Hygiene: Maintain excellent oral hygiene. Brush your teeth twice daily (including your tongue or using a tongue scraper) and floss daily to reduce bacteria and debris.
- **Mouthwash:** Using an alcohol-free antiseptic mouthwash can help reduce bacteria. *Important:* Use mouthwash at a *different time* to brushing (e.g., after lunch) to avoid washing away the fluoride from your toothpaste.
- Manual Removal (Caution Advised): Some people attempt to dislodge stones gently using a
 cotton swab or the back of a toothbrush. Avoid using sharp objects, as this can cause injury,
 bleeding, or infection.
- Water Flosser / Oral Irrigator: Using a water flosser on a low setting can sometimes help flush out debris from crypts. Be gentle to avoid damaging the tonsils.
- Coughing: Sometimes, vigorous coughing can loosen stones.
- Hydration: Drinking plenty of water helps keep the mouth hydrated and may reduce build-up.

2. Medications:

Antibiotics: These are not effective for treating tonsil stones themselves, as stones are calcified
debris, not an active infection. Occasionally, if other methods have been exhausted, a course of
antibiotics may help to eradicate the bacterial biofilm that accumulates within the tonsillar crypts.

• Pain Relief: If you have throat discomfort, simple pain relief can help.

3. Surgical Procedures (Considered if symptoms are persistent and bothersome):

If conservative measures fail and tonsil stones are causing significant problems (e.g., severe bad breath, constant discomfort, contributing to recurrent infections), referral to an ENT surgeon may be necessary to discuss further options:

- Tonsil Cryptolysis (Laser or Coblation): These are minimally invasive procedures aimed at reducing or eliminating the tonsil crypts where stones form, without removing the entire tonsil.
 - o Laser cryptolysis uses a laser to vaporise the tissue.
 - o Coblation cryptolysis uses radiofrequency energy to dissolve tissue with less heat.
 - These procedures can often be done under local anaesthetic but may require general anaesthetic. Availability on the NHS for this specific indication can be limited.
- Tonsillectomy: This is the surgical removal of the tonsils. It is the most definitive way to prevent tonsil stones as it removes the site where they form. However, it is a more invasive operation with associated risks (including pain and bleeding) and a recovery period. Tonsillectomy is usually reserved for severe or recurrent cases, particularly if associated with frequent tonsillitis meeting specific criteria, or if other treatments haven't worked and symptoms significantly impact quality of life. The threshold for NHS tonsillectomy is generally high.

Your surgeon will discuss the risks and benefits of these procedures with you if they are deemed appropriate for your situation.

Prevention

While it may not be possible to completely prevent tonsil stones, especially if you have deep crypts, you can reduce their frequency and severity by:

- Maintaining excellent oral hygiene: Brush twice daily, floss daily, and clean your tongue.
- Regular gargling: Especially after meals, using salt water or an alcohol-free mouthwash.
- Staying well-hydrated: Drink plenty of water throughout the day.
- Stopping smoking.
- Managing allergies or sinus issues: Treating post-nasal drip can reduce mucus accumulation.
- Regular dental check-ups and cleanings.

Outlook / Prognosis

Tonsil stones are generally harmless and do not typically lead to serious long-term health complications. Many people manage them effectively with simple home care. If they become persistent or very bothersome, treatments including surgical options are available. Recurrence is possible after some treatments unless the tonsils are removed.