CONDITION

Tongue problems

Tongue problems are changes in the tongue's colour, surface, feeling, movement, or size.

WHAT IT IS
Changes affecting the tongue's appearance, feeling, movement, or size

BODY SYSTEM
Mouth and digestive system

MAIN SYMPTOMS
Soreness, swelling, colour changes, surface patches

WHAT CAUSES IT
Irritation, infection, inflammation, deficiencies, medicines, or growths

HOW IT IS DIAGNOSED
Mouth examination, with swabs, blood tests, or biopsy when needed

MAIN TREATMENT
Cause-specific care, symptom relief, and oral hygiene

CAN IT BE CURED?
Sometimes - many underlying causes are treatable

IS IT AN EMERGENCY?
Sometimes - sudden swelling may threaten breathing

LONG-TERM OUTLOOK
Most minor problems settle; persistent changes need assessment

Overview

"Tongue problems" is a broad term for changes in how your tongue looks, feels, moves, or functions. The tongue may become sore, swollen, smooth, coated, discoloured, cracked, or covered with patches or ulcers.

Many tongue changes are minor. Common causes include accidentally biting or burning the tongue, irritation from a sharp tooth, dry mouth, or a harmless condition called geographic tongue. Infections, nutritional deficiencies, medicine side effects, and inflammatory conditions can also affect it.

A tongue problem matters when it interferes with eating, speaking, swallowing, or taste. Some changes can also point to a health condition elsewhere in the body. A persistent ulcer, lump, or red or white patch needs assessment because, less commonly, it may be a sign of mouth cancer.

Sudden tongue swelling is different from most tongue problems. If swelling affects your breathing or swallowing, it is an emergency.

Symptoms

Tongue problems can affect one area or the whole tongue. Changes may appear suddenly or develop over weeks.

Possible symptoms include:

A white coating can result from trapped debris, dry mouth, or poor oral hygiene. Creamy white patches that wipe away and leave a sore red surface may be oral thrush, a yeast infection.

Geographic tongue causes smooth red patches with pale borders. The patches may change shape and move to different areas. It is not contagious or cancerous, although spicy or acidic foods may make it sting.

Black hairy tongue happens when the tiny projections on the tongue become longer and trap debris, bacteria, or yeast. It can look brown, yellow, green, or black. Despite its appearance, it is usually harmless.

Burning mouth syndrome causes ongoing burning or scalding discomfort when the mouth may look normal. It often affects the tongue, lips, or roof of the mouth and may occur with dry mouth or altered taste.

- Pain, tenderness, burning, tingling, or numbness
- Swelling or a tongue that feels too large
- Red, white, yellow, brown, or black areas
- A smooth, shiny surface or loss of the usual small bumps
- Cracks, grooves, ulcers, lumps, or raised patches
- Map-like red patches with pale or white borders
- A coating that may or may not wipe away
- Reduced, altered, or unpleasant taste
- Difficulty moving the tongue, speaking, chewing, or swallowing

Causes and risk factors

Short-term soreness commonly follows a bite, burn, dental procedure, or irritation from braces,

dentures, or a rough tooth. Hot drinks, spicy foods, acidic foods, alcohol, and tobacco can worsen an already sore tongue.

Other possible causes include:

Thrush is more likely after antibiotics or when using inhaled corticosteroids like budesonide or fluticasone. Dentures, dry mouth, diabetes, and a weakened immune system can also increase the risk.

Tobacco use and heavy alcohol use increase the risk of mouth cancer. Human papillomavirus, or HPV, is linked mainly with cancers farther back in the throat, including at the base of the tongue.

- Mouth ulcers: Painful shallow sores that often heal without scarring
- Oral thrush: An overgrowth of Candida yeast in the mouth
- Geographic or fissured tongue: Usually harmless surface patterns
- Dry mouth: Reduced saliva allows irritation and coating to develop
- Nutritional deficiencies: Low iron, vitamin B12, or folate can make the tongue sore, red, or smooth
- Skin or immune conditions: Conditions such as oral lichen planus can cause white lines, red areas, or ulcers
- Medicines: Some medicines cause dry mouth, taste changes, irritation, or an increased risk of thrush
- Allergic swelling: Foods, medicines, insect stings, or other allergens may trigger rapid swelling
- Nerve-related pain: This may contribute to burning mouth syndrome
- Abnormal cell growth: Persistent ulcers, lumps, or patches can occasionally be precancerous or cancerous

Diagnosis

A healthcare professional or dentist will examine your tongue and the rest of your mouth. They may check your teeth, dentures, salivary flow, neck, and lymph nodes. You may be asked when the problem started, whether it changes, and whether eating or drinking makes it worse.

Many conditions, including geographic tongue and minor trauma, can be recognised from their appearance and history.

Further tests depend on what is found. They may include:

A biopsy removes a small tissue sample for examination under a microscope. Local anaesthetic is normally used to numb the area.

Burning mouth syndrome is usually diagnosed after other causes of burning, such as thrush, dry mouth, nutritional deficiency, or medicine effects, have been considered.

- A mouth swab or scraping to look for yeast or another infection
- Blood tests for anaemia, iron levels, vitamin B12, folate, diabetes, or other conditions
- Allergy assessment if swelling may have an allergic cause
- A biopsy for a persistent or unexplained patch, lump, or ulcer

Treatment and management

Treatment is based on the cause rather than the tongue's appearance alone. A minor bite or burn often improves with time and protection from further irritation.

Gentle self-care may include drinking enough water, using a soft toothbrush, and avoiding foods or products that clearly aggravate the area. A pharmacist can advise on suitable non-prescription pain relief or mouth products. Avoid placing aspirin directly on an ulcer because it can damage the tissue.

Specific treatment may include:

Geographic tongue and fissured tongue usually need no treatment unless they cause discomfort. Black hairy tongue often improves with gentle tongue cleaning and by addressing contributing factors such as dry mouth, tobacco, or certain medicines. Do not stop a prescribed medicine without advice.

Do not scrape, cut, burn, or apply harsh chemicals to a tongue patch. A coating that does not come away with gentle cleaning should be assessed rather than forcibly removed.

- Antifungal medicine for confirmed or strongly suspected oral thrush
- Treatment of low iron, vitamin B12, or folate after the deficiency is identified
- Dental treatment for a sharp tooth, poorly fitting denture, or other source of rubbing
- Prescribed anti-inflammatory treatment for certain mouth conditions
- Saliva-supporting measures for dry mouth
- Specialist pain management for burning mouth syndrome
- Surgery, radiotherapy, drug treatment, or a combination for mouth cancer

Complications

Most minor tongue problems heal without lasting effects. Complications are more likely when the underlying cause continues or the problem makes eating and drinking difficult.

Painful ulcers or inflammation can reduce food and fluid intake. Over time, this may contribute to dehydration, weight loss, or poor nutrition. Significant swelling can interfere with speech or swallowing.

Untreated deficiencies may continue to affect the tongue and can cause problems elsewhere in the body. Repeated thrush may also be a clue to dry mouth, poorly controlled diabetes, or reduced immune function.

Persistent inflammatory conditions can cause repeated discomfort and may need long-term monitoring. A small number of persistent mouth changes are precancerous or cancerous. Earlier assessment allows treatment to begin sooner if needed.

Rapid allergic swelling can narrow the airway. This is an immediate emergency rather than a routine tongue complaint.

Prevention

Not every tongue problem can be prevented. Geographic tongue, fissured tongue, burning mouth syndrome, and some immune-related conditions do not have a proven method of prevention.

You can reduce avoidable irritation by keeping your mouth clean, brushing gently, and having rough teeth or poorly fitting dental appliances corrected. Clean dentures as directed and remove them at night if your dental professional recommends this.

Avoid tobacco. Limiting alcohol also reduces irritation and lowers mouth cancer risk. Let hot food and drinks cool before consuming them, and use care with sharp or hard foods.

If you use an inhaled corticosteroid like budesonide or fluticasone , follow the inhaler instructions about rinsing your mouth afterward. This can lower the chance of oral thrush. Regular dental care can help identify tooth, denture, gum, and mouth changes before they become more troublesome.

Living with it and what to expect

The course depends on the type of tongue problem. A small traumatic ulcer or burn often

improves over days and heals within a few weeks. A problem that repeatedly rubs against a sharp tooth may return until the cause is corrected.

Geographic tongue can come and go for months or years. The patches may disappear and return in a different place. It does not usually damage the tongue or develop into cancer.

Fissured tongue tends to remain over the long term. Food debris may collect in deeper grooves, but gentle cleaning is often enough to control irritation or bad breath.

Black hairy tongue is usually reversible, although improvement may take time after contributing factors are addressed. Thrush commonly clears with appropriate treatment, but it can return if dry mouth, denture problems, medicine effects, or another risk factor remains.

Burning mouth syndrome may be long-lasting and can fluctuate. Treatment often focuses on reducing pain, improving mouth comfort, and managing related sleep, mood, dry-mouth, or taste problems. Improvement may be gradual rather than immediate.

Keep track of a persistent change by noting when it started and whether it is growing, bleeding, or affecting swallowing. A clear photograph can help show how it changes, but it cannot replace an examination.

When to get medical help

Call emergency services now if your tongue or throat suddenly swells and you have difficulty breathing, noisy breathing, faintness, widespread hives, or trouble swallowing saliva. If you have been prescribed an adrenaline auto-injector for severe allergy, use it as directed.

Seek urgent medical care if swelling is increasing quickly, you cannot swallow fluids, you are drooling, or severe mouth pain occurs with fever and rapidly spreading swelling.

Arrange a prompt appointment with a dentist or healthcare professional for:

Routine assessment is appropriate for a coating, mild soreness, taste change, or recurring pattern that persists but is not rapidly worsening. A dentist is often a suitable first contact for visible tongue changes.

- An ulcer lasting about three weeks or longer
- A persistent red, white, or mixed red-and-white patch
- A lump, hard area, unexplained bleeding, or increasing numbness
- Ongoing difficulty chewing, speaking, or swallowing
- Unexplained weight loss or a persistent lump in the neck

- Repeated thrush or a sore, smooth tongue
- Tongue pain or burning that is not settling

Common questions

Why is my tongue white?

A white tongue can come from trapped debris, dry mouth, smoking, irritation, or thrush. Some white patches are caused by inflammatory conditions and do not wipe away. If a patch persists, hurts, bleeds, or cannot be gently removed, arrange an examination.

Why does my tongue look like a map?

Moving red patches with pale borders are typical of geographic tongue. The pattern may change from day to day. It is usually harmless and is not an infection, but a clinician or dentist can confirm the cause if the appearance is new.

Why does my tongue burn when it looks normal?

Dry mouth, nutritional deficiencies, acid reflux, medicine effects, nerve changes, or burning mouth syndrome can cause this feeling. Because several conditions produce similar symptoms, ongoing burning should be assessed rather than diagnosed from appearance alone.

Are cracks in my tongue dangerous?

Grooves are often due to fissured tongue, a usually harmless condition. Gentle cleaning may prevent debris collecting in the cracks. New painful cracks, bleeding, swelling, or other persistent changes should be checked.

Can stress cause tongue problems?

Stress may contribute to mouth ulcers, teeth grinding, dry mouth, or increased awareness of burning and pain. It should not be assumed to explain a persistent lump, patch, ulcer, or swelling.

Is a tongue ulcer cancer?

Most tongue ulcers are caused by minor injury and are not cancer. An ulcer that does not heal within about three weeks, particularly if it feels hard or bleeds, needs prompt assessment to rule out a more serious cause.

Sources

- NHS. Sore or white tongue
- NHS. Mouth ulcers
- NHS. Oral thrush in adults
- National Institute of Dental and Craniofacial Research. Burning Mouth Syndrome
- American Academy of Oral Medicine. Geographic Tongue
- DermNet. Hairy tongue
- National Institute for Health and Care Excellence. Suspected cancer: recognition and referral, NG12