

## INFORMATION FOR PATIENTS

---

# Ear, Nose and Throat Department

## Information for adults undergoing a temporal artery biopsy

---

### What is Giant Cell Arteritis (GCA)?

Giant cell arteritis, sometimes called temporal arteritis, is a condition which causes inflammation in the wall of arterial blood vessels usually seen in the scalp. The inflammation causes the artery walls to swell which narrows the channel for blood to flow and can cause blockage of affected arteries. Blocked arteries can cause loss of blood supply to the tissues involved resulting in serious problems such as loss of blood supply to the eye causing blindness.

The exact cause of GCA is not known but it usually affects people over 50 years of age and becomes commoner with increasing age. It is two to three times commoner in women.

### What are the symptoms of GCA?

GCA can cause different symptoms in different people. The symptoms can be mild or absent and not occur until late in the course of the disease.

Common symptoms include:

- Low grade temperature.
- A new headache, especially over the temples.
- Pain in the jaw muscles while chewing.
- Scalp tenderness, especially over the temples.
- Swollen arteries over the temples.
- Disturbances of vision, such as a curtain in the field of vision, double vision, or loss of vision.
- Poor appetite and weight loss.
- Aching and stiffness of shoulders and hips.

### How is GCA treated?

If GCA is suspected, emergency treatment is started immediately with high dose steroids to prevent complications, including sight loss. A small dose of aspirin (75mg) can also help to keep the arteries flowing. It is usual to need up to two years or even longer of the drug treatment.

The long-term use of steroids however, can lead to side effects which include weight gain, diabetes, blood pressure, thinning of the bones and skin, cataracts, and psychiatric problems, amongst others. Therefore it is important to be able to confirm the diagnosis of GCA as soon as possible.

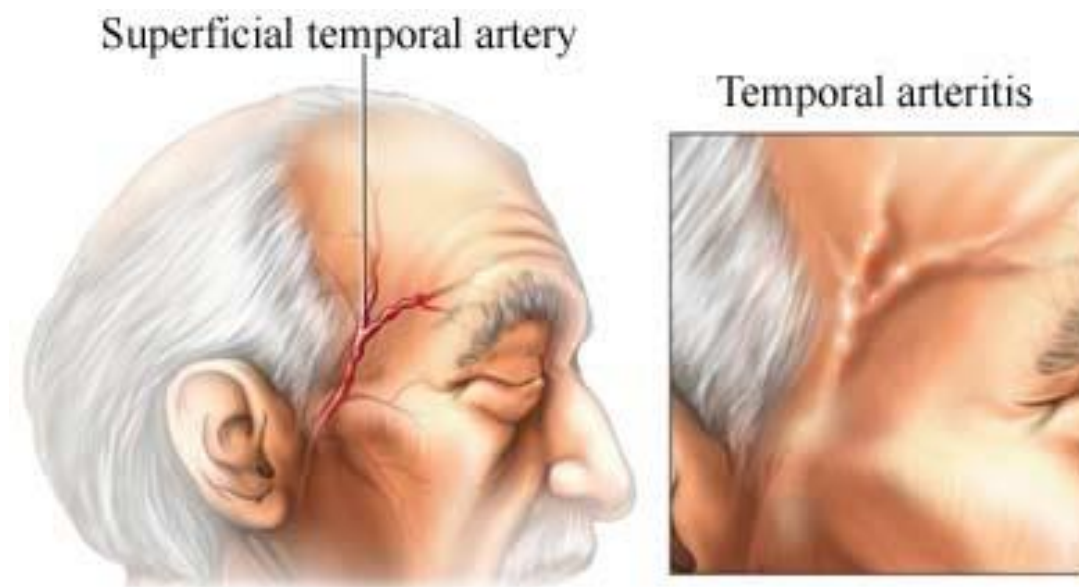
### **Why do I need a temporal artery biopsy (TAB)?**

The best way to diagnose GCA is temporal artery biopsy, which needs to be done as soon as possible because the chance of a positive result drops quickly after only a couple of weeks on steroids.

The superficial temporal artery is a blood vessel close to the skin located on either side of the forehead, in both temples. It is pictured below (Figure 1).

**Figure 1**

### **Temporal artery position**



*Photo copyright of Vascular Surgery Associates, LLC*

### **What is the benefit of a TAB?**

The aim of the procedure is to take a sample of the temporal artery and send it to the pathology department to be looked at with a microscope. The histopathologist (a doctor trained in looking at these samples) will be able to see whether the temporal artery sample shows signs of inflammation in keeping with GCA, and confirm the diagnosis.

### **Are there any alternatives to TAB?**

There are no other current tests which can definitively make this important diagnosis. Blood tests can help, but not everyone has signs of raised inflammation in the blood.

An ultrasound of the head and neck blood vessels or an angiogram with CT or MRI, which involves special pictures of the arteries, can be sometimes helpful. However, the 'gold standard' diagnostic test for GCA is a TAB.

### **What is a TAB?**

This is a small operation to remove a 2cm piece of the temporal artery from the temple region. It is usually done under local anaesthetic, which means you are awake. This involves an injection in the skin over the artery to make this numb and painless. Occasionally, we may need to shave a little hair from the temple, which usually regrows very quickly.

It is safe to take a sample of this artery as there are a number of blood vessels that supply this area of the scalp. This procedure is not a treatment in itself.

### **What happens before the biopsy?**

Before the operation can begin, your surgeon will explain the procedure and make sure that you have been informed of the risks and benefits before asking you to sign a consent form giving permission to proceed.

You can eat and drink as normal. You should take any medications as usual unless specifically asked to stop, for example blood thinners such as warfarin, which you will start again after the operation.

### **How long will the biopsy take?**

The surgery takes place in the operating theatre. Usually it takes only about 45 to 60 minutes, occasionally longer if the artery is difficult to find. You should be able to go home just an hour or so after the operation.

### **What happens during the biopsy?**

Once in the operating theatre your skin will be cleaned with antiseptic and a drape will be placed around the area to keep it clear for the biopsy. Then the local anaesthetic will be injected to numb the surgical area. When the skin is numb, a cut is made along the artery on the temple usually 3 - 4cm long, sufficient to remove the necessary 2cm piece. The cut ends of the artery left behind are tied off (ligated) to prevent bleeding and the cut skin is closed with a buried, dissolvable suture before a simple adhesive dressing is applied (Figure 2 on the next page). Then you are returned to the ward and can have refreshments, if desired, before going home.

### **What happens after the biopsy?**

It is a good idea to have someone to help you at home, especially if you feel shaky or not yourself, which may happen even after a simple operation.

At home you should continue with life as normal. You should take your medications and the prednisolone and keep the dressing on for a day or two. You should take care when you are washing your face and hair for a week or so, until the cut has healed.

The result from the laboratory is sent to the original doctor who first saw you. The surgeon will have no further involvement.

## Figure 2

### Stitched up incision



*Photo copyright of Merck manuals*

### How will I feel after the operation?

The cut is not usually very painful afterwards, but you should take a mild painkiller, such as paracetamol for this or any headache, if needed.

### When can I go back to work?

How soon you return to work will depend on your occupation. Please discuss this with the surgeon prior to the surgery.

### What are the risks of the operation?

TAB is generally a safe procedure, but, like all medical interventions, carries a small risk of complications which include:

- **Wound infection** – if the surgical wound becomes more red and swollen, or develops discharge, may need an antibiotic from your doctor.
- **Bleeding/bruising** during the operation and for a short time afterwards. Bleeding should be controlled by applying pressure then a clean dressing once stopped.
- **Scar** – the wound is often hidden in the hairline to reduce any obvious scar.
- **Nerve injury** – temporary or permanent damage to unseen nerves around the temple, which can produce numbness or a drooping brow. This is rare.

If you are concerned about any symptoms after the procedure, please contact your GP in the first instance.

**Keep this information document. Use it to help you if you need to talk to the healthcare team.**

**This document is for information purposes only and should not replace advice that your relevant healthcare team will give you.**

### **Further information**

If you need further information about the procedure, please contact the ENT team secretaries via switchboard. The telephone number is 01623 622515.

More information regarding giant cell arteritis can be found on these websites:

- Vasculitis UK  
[www.vasculitis.org.uk/about-vasculitis/giant-cell-arteritis-temporalarteritis](http://www.vasculitis.org.uk/about-vasculitis/giant-cell-arteritis-temporalarteritis)
- Arthritis Research UK  
[www.arthritisresearchuk.org/arthritisinformation/conditions/giant-cell-arteritis.aspx](http://www.arthritisresearchuk.org/arthritisinformation/conditions/giant-cell-arteritis.aspx)
- Vasculitis Foundation  
[www.vasculitisfoundation.org](http://www.vasculitisfoundation.org)

### **Further sources of information**

NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)

Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

### **Patient Experience Team (PET)**

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

**King's Mill Hospital:** 01623 672222

**Newark Hospital:** 01636 685692

**Email:** [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net)

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net).

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you. External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them. If you require a full list of references (if relevant) for this leaflet, please email [sfh-tr.patientinformation@nhs.net](mailto:sfh-tr.patientinformation@nhs.net) or telephone 01623 622515, extension 6927.

To be completed by the Communications office Leaflet code: PIL202407-04-TAB Created: January 2019 / Revised: July 2024 / Review Date: July 2026
---