Temporal Artery Biopsy

Introduction
You have been given this leaflet because it has been suggested that you should have a Temporal Artery biopsy. This leaflet explains many important points but please discuss any questions that you may have with your surgeon.

What is Temporal Arteritis (TA)?
TA is an inflammatory condition (vasculitis) affecting the medium and large blood vessels on the side of the head (temporal arteries). It is more commonly seen in older people and rarely diagnosed before the age of 50.

The cause of TA is unknown but if left untreated can cause reduction of the blood supply to the eyes or the brain. TA can therefore cause blindness and/or a stroke. TA is regarded as a medical emergency.

Symptoms
Symptoms of fatigue, loss of appetite, weight loss and fever are often found.

A headache, with pain and tenderness over one side of your head, is usually the main complaint of this disease.

Diagnosis
The diagnosis is usually suspected because the doctor has recognised the typical collection of symptoms and clinical signs. Blood tests are taken to check for inflammation.

However, these tests are not specific for TA. In some cases a biopsy of the temporal artery is needed.
The superficial temporal artery is a blood vessel close to the skin that can be felt on both temples located on either side of the head (see picture below).

![Diagram of the superficial temporal artery](image)

**Figure 1: Location of superficial temporal artery**

**Why do I need a temporal artery biopsy?**

The temporal artery biopsy may help your team decide whether you have temporal arteritis. A temporal artery biopsy will also help determine what medication you need to take and whether you need to take medication long term. In some cases where suspicion of TA is high, we may treat you with medication even if the biopsy is negative or inconclusive.

**What are the benefits?**

The aim of the biopsy is to take one small sample of one of the temporal arteries (see Fig. 1) which will be studied under a microscope by someone trained in looking at these samples. If there are signs of inflammation in keeping with temporal arteritis, this will confirm the diagnosis.
What are the risks?
Side effects of temporal artery biopsy are rare but could include:

- Infection in the wound requiring a course of antibiotics.
- Scarring. The wound is often hidden in a skin fold or the hairline to reduce any obvious scar. Around the actual site hair may not regrow.
- Problems with the blood circulation to the skin and scalp can lead to an ulcer (non-healing area).
- The sample may not give an answer (non-diagnostic) and your medical team may ask you about the need to perform another biopsy.
- Nerve damage. This can lead to numbness or weakness on the same side of the face as the artery being sampled. This may or may not recover over time.
- Stroke is an extremely rare complication of TA. There has been a reported incidence of stroke in the literature following this procedure in someone with confirmed TA.

Is there an alternative?
Yes, ultrasound is sometimes used.

You do not have to have this procedure but it will make it more difficult to find the cause for your symptoms.

The surgery
We perform most temporal artery biopsies under local anaesthetic. This means that you are awake during the procedure. You will not be able to feel any pain after having the local anaesthetic but you may still feel pressure and movement.

If you do feel any discomfort please let your surgeon know and they will give you more local anaesthetic.

The effects of the local anaesthetic will last for several hours, until the medication wears off.

If you have a local anaesthetic you will be able to eat and drink normally before the procedure.
The biopsy will take between 45 minutes to 1 hour to perform.
You will have stitches at the wound site. You will be told by your surgeon if the stitches require removal by the practice nurse at your GP’s surgery.

**Aftercare**

You will have to keep the wound clean using a cotton bud dipped in boiled cooled water.
Keep the wound dry for 7 days.
You may be given an antibiotic ointment to use on the wound for 7 days.
You may need to make an appointment with the practice nurse at your GP’s surgery to have the stitches removed after 7 days.
You may be able to work the following day depending on your occupation. Please discuss with your surgeon prior to the procedure.
If you have pain, discharge or swelling at the biopsy site please contact the ENT department. The number is at the end of this leaflet. Out of hours please attend your local Accident & Emergency Department.

**Results**

You will be contacted via letter from your medical team with the results of the biopsy within 6 weeks of your surgery.

**Contact information**

ENT Department
Tel: 0300 422 6206
Monday to Friday, 8:00am to 5:00pm

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