

Patient Information: Pituitary Surgery

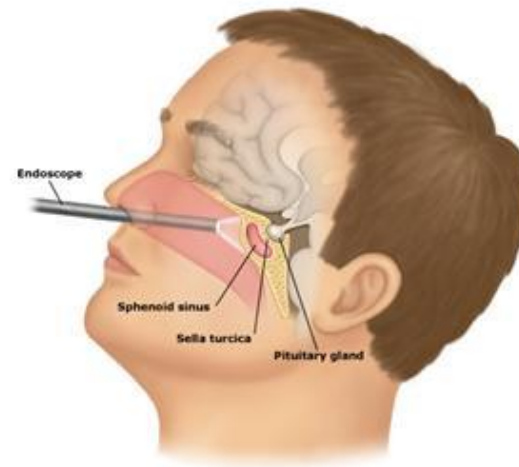
The **pituitary gland** is found behind the nose, on the underside of the brain. The pituitary gland produces important hormones. Tumours of the pituitary gland are often removed by pituitary surgery. Pituitary surgery aims to remove the tumour leaving the normal pituitary gland intact where possible.

Transsphenoidal Surgery is the type of pituitary surgery most commonly used to remove a pituitary tumour.

- For this procedure you will be given general anaesthetic and so you will be asleep for the whole operation.
- During the operation a very small cut, just over 1cm long, is made in the back or central part of the nose or in the upper lip.
- The surgeon passes an instrument, often an endoscope, through the cut to see the tumour. An endoscope is a long tube with a light and camera on the end.
- The tumour is then removed using surgical instruments. Sometimes a small piece of fat is taken from the tummy and inserted at the site where the tumour was removed.
- The cut is then closed and the operation is complete.

Benefits of Transsphenoidal Surgery

Transsphenoidal surgery can have huge benefits. In some cases, if the tumour is small enough surgery may **cure** pituitary tumours. In other cases, it can **reduce symptoms**, such as visual loss. It is a good idea to ask your doctor any questions you may have about this.



Risks of Transsphenoidal Surgery

Transsphenoidal surgery, as with any operation, has associated risks. These are:

- A risk that surgery is ineffective and does not cure the tumour or reduce symptoms, such as visual loss.
- A 5-10% risk of injury to the normal pituitary gland. This can reduce the hormones produced by the pituitary gland. This is treated with hormone replacement.
- A 1-2% risk of permanent Diabetes Insipidus. This occurs if the amount of Antidiuretic Hormone is reduced. Symptoms of Diabetes Insipidus are extreme thirst and excessive urine production. This is also treated with hormone replacement.
- A 1% risk of a leak of the fluid surrounding the brain and pituitary gland: a cerebrospinal fluid leak. This may be repaired by a second operation as there is a risk of developing meningitis.
- A small risk of complications associated with general anaesthetic.

Very rarely Transsphenoidal surgery causes:

- damage to the carotid arteries next to the pituitary gland. This is a very serious complication which can cause a stroke or death.
- damage to the nerves leading to the eye causing blindness.

Before coming into hospital

Around 2 weeks before your operation you will have a clinic appointment. During this appointment the doctor will discuss the operation with you and answer any questions you have. You will also have some tests, such as blood tests, to make sure you are as healthy as possible for the operation. Please bring a list of your current medications to the appointment. The doctor may ask you to stop taking some medications before the operation.

Preparing for your operation

- You will need to stop taking certain medications before the operation. These include any:
 - blood-thinning medications, such as **Aspirin**, **Clopidogrel** or **Warfarin**.
 - non-steroidal anti-inflammatory medications, such as **Ibuprofen**
- You should also stop taking medications, as advised by your doctor at your clinic appointment.
- When you come into hospital you should bring nightwear, a list of your current medications, toiletries and anything else you are likely to need during your stay.
- Please let the doctors or nurses know if you have any allergies.

Before the operation

You will be admitted to hospital the day before surgery. The anaesthetist and the surgeon performing your operation will come and visit you before the operation. They will explain the operation to you, answer any questions you have and ask you to sign a consent form.

During the operation

The operation will take around 3 hours.

After the operation

Once the operation is over you will be taken to the recovery room where you will wake up. When you wake up you may have a headache and nasal congestion and feel light headed. These symptoms will be reduced with medication. When you wake up you will also have your blood pressure, blood oxygen levels and heart rate monitored. Later you will be taken back to the ward.

After your operation:

- Try to prevent damage to the site of surgery. For example, avoid blowing your nose.
- Do not drive a vehicle for 2 weeks
- Do not take non-steroidal anti-inflammatory drugs, such as Aspirin until your doctors advise you to.

Going home

Usually you can go home after 5 days in hospital, provided there are no complications. Contact your doctor immediately if you develop the following symptoms:

- Frequent swallowing, nasal discharge, nosebleeds or breathing difficulties.
- A high temperature, headache and neck stiffness
- Extreme thirst or excessive urine production

Getting back to normal

It normally takes around 2 weeks before you can return to work. However, this varies, depending on your job and how you feel after surgery.

Check-Ups

After the operation you will have a clinic appointment with your surgeon. You will also need to have blood tests to check your pituitary gland is producing enough hormones.

Written by Helen Fraser, Endocrine BSc student, 2011

Further Information:

- 1) www.imperialendo.com
- 2) The Pituitary Foundation - <http://www.pituitary.org.uk/>