PAROTID GLAND SURGERY

WHAT IS THE PAROTID GLAND?

The parotid gland is found on the side of the face just in front of the ear close to the back part of the jaw bone and in the very upper part of the neck close to the ear. There are two parotid glands, one on each side. They produce watery saliva which passes into the upper part of the mouth close to the upper teeth.

DISEASES OF THE PAROTID GLAND

The parotid gland may be affected by swellings or lumps (tumours) that may be a result of an overgrowth of parts of the salivary gland. The majority of swellings of the parotid gland are benign, which means they are unlikely to spread to other parts of the body as cancerous growths do. Very rarely malignant or cancerous tumours can affect the parotid gland. Special tests will be performed to identify whether this is the case.

INVESTIGATIONS OF THE PAROTID GLAND

Tests for the swellings (tumour) of the parotid gland include a range of x-ray tests.

**Ultrasound Scan of the Salivary Gland:**

This will allow for the nature of the swelling (tumour) of the salivary gland to be determined and for the specialist ultrasound doctor to perform needle biopsies using the ultrasound as a guide for the needle.

**Fine Needle Aspiration:**

Needle biopsies can be taken from the swellings of the parotid gland. These cells will be looked at by a specialist Cytologist who will help to determine the nature of the swelling (and whether this is benign or malignant). Occasionally the tests may not determine the exact nature of the swelling (tumour).

**Sialography:**

This is a specialist x-ray that is performed of the salivary gland after some contrast of dye has been injected into the duct off the salivary gland. This relies on the x-ray doctor identifying the duct opening in the mouth and filling the duct through the mouth with contrast liquid after which either x-rays or CT (computerised tomogram) scan images will be taken.

Surgery for the Parotid Gland

Most parotid lumps are usually benign (approximately 80%). We do, however, recommend that these are removed since they continue to grow slowly and can become unsightly or after many years of slow growth can become cancerous.
(malignant). Also the larger the lump the more difficult it is to remove and potentially the larger the scar. Lastly, despite all of the tests that have been mentioned there is always some concern about the exact nature of the lump until it has been removed.

Parotidectomy is the surgical removal of part or all of the parotid gland.

You may change your mind about the operation at any time even if you have signed a consent form as this does not bind you to having the operation.

Most cases requiring surgery are discussed at the Multi-disciplinary Team Meeting (MDT) held at St Bartholomew’s Hospital where a range of different specialists involved in the care and treatment of patients with swellings in the head and neck area are considered for the most appropriate treatment. You may wish your case to be discussed at this forum or ask for the results or conclusions of the deliberations at this meeting.

PAROTIDECTOMY SURGERY

The operation is performed under a general anaesthetic, which means that you will be asleep throughout the procedure. A cut (incision) will be made running from in front of the ear and down in towards the upper part of the neck. This incision or cut heals very well as this is almost the same incision as is used in ‘facelift’ surgery, in time the scar is likely to be minimally noticeable.

At the end of the operation the surgeon will place a small plastic tube (drain) through the skin to ensure that any accumulation of blood, saliva or liquid is removed by the drain into a plastic bottle. This helps in the healing process. This drain is usually removed when there is less drainage from the tube. After removal of the drain you may be allowed to go home. Most patients require twenty-four to forty-eight hours in hospital after the operation.

POSSIBLE COMPLICATIONS AND CONSEQUENCES

There are some risks that you need to be aware of prior to giving consent for surgery. The potential complications are uncommon. Listed below are some of the problems associated with surgery, This is not a comprehensive list of the complications associated with surgery but does cover most problems including rare ones associated with this procedure. If you wish to discuss further specific issues, please do not hesitate to do so with your doctor.

Nerve Weakness
Facial weakness; there is a very important nerve that helps to move the muscles of the face and facial expression, the facial nerve. This passes through the parotid gland. This nerve can be damaged during the surgery leading to weakness to part or all of the face. In most cases, the nerve works normally after the surgery. There can, however, be temporary weakness of the nerve (in approximately 15% of cases) and this can occur in some of the branches of the facial nerve which are close to the lump. In 1% of cases there may be a permanent weakness of the face following this surgery for benign tumours. The incidence is higher where there is a cancerous growth as these tumours are more likely to damage and invade the nerve and may have already affected the nerve function.

**Numbness of the Face and Ear**

The skin of the earlobe and the side of the neck and face may become numb after the surgery. This may last for a few weeks up to a few months. There may be a permanent area of numbness around the earlobe and just below the earlobe. This a consequence of loss of the skin nerves for sensation being divided to allow access to the deep part of the gland and identification of the nerve that moves the face (facial nerve).

**Fluid Collections**

Haemorrhage or bleeding can accumulate fluid under the skin. A blood clot can collect beneath the skin despite the presence of a drain. This may occur in approximately 5% of patients and may require a return to the operating theatre for removal of any liquid from under the skin and replacing the drain.

**Salivary Collections**

In two to five percent of patients the cut surface of the parotid gland may leak some saliva which can collect under the skin. If this happens it may be necessary to remove the saliva. This can occasionally be removed using a needle to suck out the fluid rather like during a blood test but may need to be repeated until the saliva leak settles.

**Increased Facial Sweating (Frey's syndrome)**

Some patients find that after this surgery their cheek area can become red, flushed and sweat excessively whilst they are eating. This occurs because the nerve that supplies the gland encouraging it to produce extra saliva during eating is disrupted by surgery. This nerves regrows but supplies the sweat glands of the overlying skin instead of or as well as the parotid gland. This can usually be treated by the application of a roll-on antiperspirant or other treatments.

**Will my mouth be dry?**

You are very unlikely to notice any dryness of the mouth as there are multiple salivary glands in the mouth and throat. There are also three other major salivary glands, the submandibular gland which lie as a pair below the jaw and the other parotid gland that lies on the other side in front of the ear.

**How long will I be off work?**

Khalid Ghufoor © Barts and the London
You will need approximately two weeks off work to allow for healing. You may experience some facial pain after the surgery, more so when the drain is left in the wound and this will ease when the drain has been removed. You may require regular strong pain killers to help control this. Occasionally some blood may trickle into the ear during the surgery causing discomfort and may be removed by the use of eardrops.