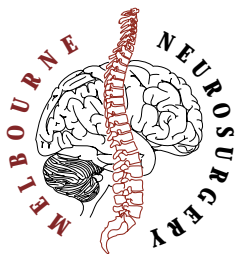


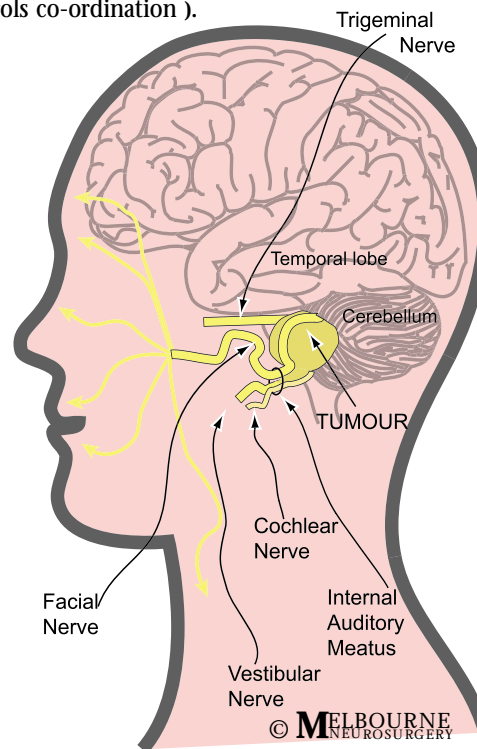
PROCEDURE INFORMATION

REMOVAL OF ACOUSTIC NEUROMA



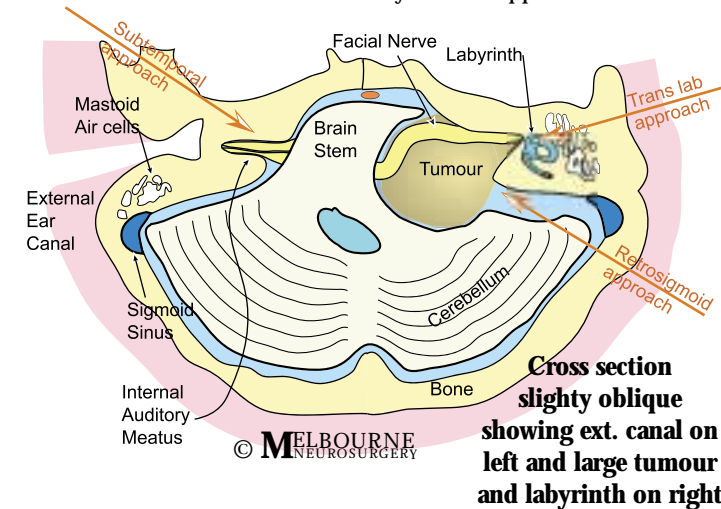
WHAT IS AN ACOUSTIC NEUROMA ?

This is a benign tumour that occurs on one of the nerves involved with your hearing and balance. It usually grows very slowly and pushes the surrounding nerves and brain tissue out of the way. It mostly grows in and then out of the canal (internal auditory meatus [I.A.M.]) that contains these nerves in the back of the brain. As it grows it pushes on certain structures and it is this that produces your symptoms. The COCHLEAR NERVE (hearing) the loss of this is the commonest symptom. The VESTIBULAR NERVE (balance) this is usually the nerve that the tumour arises from. The FACIAL NERVE (controls the movement of the side of the face) it is uncommon for this to be a presenting feature. The TRIGEMINAL NERVE (sensation to the side of the face) usually only in a big tumour. The CEREBELLUM (the back of the brain that controls co-ordination).



The treatment options are to

- (i) monitor the tumour and see if it grows (small tumours or patients with bad co-existing disease).
- (ii) Stereotactic radiosurgery (using high dose focal xray treatment)
- (iii) Surgery
 - Subtemporal approach
 - Retrosigmoid approach
 - Trans labyrinthine approach



Which operation ?

This depends on the size/location of the tumour and how much hearing you have. If it is a small tumour in the canal and your hearing is normal then the subtemporal approach (under the temporal lobe) is used. If it is in the canal there is a large amount of tumour pushing into the brain then the trans labyrinthine (through the mastoid / hearing and balance structures) approach is used. If a subtotal removal is planned in an elderly or sick patient (or if there is no tumour in the canal then a retrosigmoid (behind the sigmoid sinus) approach is used.

What happens at surgery ?

In the operating theatre you are given a general anaesthetic and then positioned with the lesion uppermost. A special monitor is placed onto the muscles in the face to monitor the facial nerve to reduce the risk of damage. A catheter is placed into the back to drain the fluid around the spine and brain. The area of the incision is then shaved and prepared with anti-septic. You are covered in drapes so that only the incision can be seen.

Local anaesthetic is injected and then the skin is cut.

TRANS LABYRINTHINE An incision is made behind the ear. The Ear Nose and Throat Surgeon involved drills down through the mastoid air cells, then through the labyrinth to find the facial nerve in the bone. He follows this into the I.A.M. and drills out enough bone to see and remove the tumour. Both The Neurosurgeon and the E.N.T. surgeons then remove the tumour. The difficulty is in peeling the tumour away from the brainstem and removing the very thinned out facial nerve from the tumour. If the facial nerve is damaged then the face on that side drops. When all the tumour is removed then the cavity left behind is filled with some fat from your abdomen. The skin is then sewn up and a dressing applied.

RETRO-SIGMOID An incision is made behind the ear. A hole in the bone is drilled down to the dura (lining of the brain) then a special drill cuts a disc of bone which is lifted off the dura. The dura is cut to expose the Cerebellum which is gently retracted out of the way. The tumour is then visualised. The tumour is then resected (a special probe is used to identify the facial nerve). Once the tumour is removed the bleeding is stopped and the dura is repaired. The bone is replaced. The skin is then sutured.

SUBTEMPORAL A hole in the bone is drilled down to the dura then a special drill cuts a disc of bone which is lifted off the dura. The dura is cut to expose the temporal lobe this is gently lifted up out of the way. We then dissect along the underside of the temporal lobe to find the top of the I.A.M. This is then drilled out. The tumour is then identified and removed. The facial nerve is monitored as before. We aim to try to save the hearing in this approach. When all the bleeding is stopped the dura is repaired. The bone is replaced. The skin is then sutured.

WHAT HAPPENS NEXT ?

You will wake up in recovery and after about 1 hour you will be transferred to the ward. The nursing staff will be continually checking your pulse/blood pressure/limb strengths and level of alertness looking for any changes to indicate a complication. During the first night on the ward you will be woken for these observations. You will have intramuscular and oral analgesia . Operations on the head do not often hurt much.

Sometimes you will have difficulty passing water and a you may require a catheter(this may have been inserted for the operation).

In the next day or so the drip in your arm will be removed. Usually this is 2 days after surgery. The catheter in your back is removed before you are encouraged to go for a walk. It is common to have nausea and be unsteady on your feet for a few days(this can be helped with medications). Gradually over the next few days you will be able to get around as normal. When you are comfortable you will be able to go home. You may have a repeat scan of your head before going home. Commonly you will have a headache for a while after the operation. The sutures are usually removed about 7 - 14 days after the surgery.

You will be discharged about 5-7 days post-operatively. On discharge you will be able to perform most tasks of daily living (e.g. showering/dressing/etc.) Depending on how quickly you recover from any preoperative disability you may require rehabilitation.

WHAT HAPPENS WHEN YOU GO HOME ?

You will be tired
It is common to require a rest in the afternoon
You may have intermittent headaches.

These will all improve with time.

Your steroids dose should be reducing slowly
DO NOT DRIVE TILL YOU ARE REVIEWED.
You will be reviewed at 4 - 6 weeks post operatively.

WHAT ARE THE RISKS?

Discuss these and others with your surgeon

THE COMMON RISKS ARE

Fluid leak from the brain
Infection(treated with antibiotics)
Post operative blood clot requiring drainage.
Stroke/ Damage to the Facial Nerve
Seizure
Death (rare)
Clot in the legs(can travel to the lungs[uncommon])
Complication not related directly to the surgery
e.g. Pneumonia
Heart attack
Urine infection

WHAT YOU SHOULD NOTIFY YOUR DOCTOR OF AFTER SURGERY

Increasing Headache /Fever /Fitting
Swelling or infection in the wound.
Fluid leaking from the wound or nose.
Weakness or numbness (especially of the face)
Drowsiness

HEARING What Happens ?

Unless it has been an operation to save hearing, it will disappear in the ear with the tumour.

IS THERE A CHANCE OF A RECURRENCE OF THE TUMOUR ? YES But usually only if there has been a known subtotal removal

WHAT ABOUT THE FACIAL NERVE ?

Your facial nerve may be weak initially after the operation. If it was damaged in attempting to remove the tumour from it it may not recover and a procedure will need to be done to either repair the nerve or help the appearance of the face.

YOU WILL BE ASKED TO SIGN A CONSENT FORM TO SAY THAT YOU UNDERSTAND THE RISKS . IF YOU ARE NOT SURE ASK BEFORE YOU SIGN.

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