



SANAMI

Sydney Acoustic Neuroma and Meningioma Institute

Trigeminal Neuralgia

Trigeminal neuralgia is a severe debilitating pain affecting one side of the face. It is described as the most severe pain endured by humans. Episodic sharp electric shock like pains spread over parts of the face. There are classically triggers that induce the pain, including talking, eating, washing the face, applying make-up, kissing, and cold wind blowing over the face. In severe cases patients are unable to eat or drink. Curiously, the condition is more common in females, and more common on the right than the left. Overall it is relatively rare with an annual incidence of 4 per 100,000 population.

The usual cause of trigeminal neuralgia is compression of the nerve as it exits the brain stem by a blood vessel (usually an artery, occasionally a vein). An MRI scan is always essential as some cases are caused by other conditions, including skull base tumours (meningiomas, schwannomas, epidermoids, cancers) or Multiple Sclerosis.

Surgery for classical trigeminal neuralgia due to vascular compression should be done by a specialist skull base neurosurgeon, as the approach is identical to that used for tumours at the skull base in the cerebello-pontine angle. The surgery is known as a MicroVascular Decompression (MVD). It involves making a hole in the skull behind the ear, opening the lining of the brain (dura) and inspecting the origin of the trigeminal nerve using the microscope for magnification and illumination. In most cases a blood vessel, usually an artery, sometimes a vein, is found to be compressing the origin of the nerve. The vessel is carefully moved away from the nerve. It is held away with one or more small pieces of woven fabric (Teflon), which remains in place and cushions the nerve from the vessel.

The surgery is successful in more than 85% of cases and allows the patient with severe Trigeminal Neuralgia to wean off the anticonvulsant medication and continue a normal life free of this most severe and incapacitating pain.

