

# Craniotomy for Microvascular Decompression for Glossopharyngeal Pain Disorder and Hemifacial Spasm

*University Neurosurgery Information Sheet*

## **General indications for the procedure:**

Compression on the cranial nerve often causes pain or dysfunction. Microvascular decompression is a procedure designed to move a blood vessel from one of the cranial nerves to stop pain disorders or functional disorders.

## **Description of the procedure:**

Under general anesthesia with the patient fully asleep, the area behind the ear is sterilely prepped, draped, and shaved to remove any hair. An incision is made through the scalp and the neck muscles behind the ear. A bone opening is made, called a craniotomy. This removes a portion of the bone. In most cases, this bone is replaced at the end of surgery. The dura, a layer separating the bone from the brain, is then opened. The area near the cranial nerves behind the ear is then exposed under the microscope. The blood vessel compressing the cranial nerve is then carefully moved away from the cranial nerve. In most cases, a small padding will be placed between the artery and the cranial nerve to keep them separated. At the end of surgery, everything is closed and a sterile dressing is applied.

## **Risks of the procedure:**

The risks of the procedure involve the general risks of any operation such as infection, bleeding and general anesthesia. Specific risks to the microvascular decompression operation include cerebrospinal fluid leak where by brain fluid may leak out the wound or into the middle ear, injury to the cranial nerve which may involve difficulties with swallowing, speech, hearing, facial weakness, facial numbness, double vision or pain syndromes, injury to the blood vessel which could result in stroke, injury to the brain stem or cerebellum which could cause numbness, weakness, coordination problems, coma or death, pain behind the ear or need for further surgery. There is also the possibility that the procedure may not work and that further procedures may be necessary.

## **Procedure alternatives if any:**

Alternative to the procedure would be to not have surgery but to continue on with medical therapy. In the case of trigeminal neuralgia, the alternatives include a needle procedure through the face, called radiofrequency rhizotomy or radiosurgery. Patients should discuss questions regarding these alternatives with the surgeon.

## **Probable consequences of refusing the procedure:**

The probable consequences of refusing the procedure are persistent pain or persistent symptoms.

## **Persons performing the procedure:**

The surgical team for this procedure is large. This involves, but is not limited to, the attending surgeons, resident surgeons, surgical nurses, physician assistants, surgical technologists and anesthesiologists. Everyone involved will be performing important tasks related to the surgery in accordance with the hospital policies, and based on their skill set and under the supervision of the responsible practitioners.