TITLE OF OPERATION: , Right suboccipital craniectomy for resection of tumor using the microscope modifier 22 and cranioplasty.,INDICATION FOR SURGERY: , The patient with a large 3.5 cm acoustic neuroma. The patient is having surgery for resection. There was significant cerebellar peduncle compression. The tumor was very difficult due to its size as well as its adherence to the brainstem and the nerve complex. The case took 12 hours. This was more difficult and took longer than the usual acoustic neuroma.,PREOP DIAGNOSIS: , Right acoustic neuroma.,POSTOP DIAGNOSIS: , Right acoustic neuroma.,PROCEDURE:, The patient was brought to the operating room. General anesthesia was induced in the usual fashion. After appropriate lines were placed, the patient was placed in Mayfield 3-point head fixation, hold into a right park bench position to expose the right suboccipital area. A time-out was settled with nursing and anesthesia, and the head was shaved, prescrubbed with chlorhexidine, prepped and draped in the usual fashion. The incision was made and cautery was used to expose the suboccipital bone. Once the suboccipital bone was exposed under the foramen magnum, the high speed drill was used to thin out the suboccipital bone and the craniectomy carried out with Leksell and insertion with Kerrison punches down to the rim of the foramen magnum as well as laterally to the edge of the sigmoid sinus and superiorly to the edge of the transverse sinus. The dura was then opened in a cruciate fashion, the cisterna magna was drained, which nicely relaxed the cerebellum. The dura leaves

were held back with the 4-0 Nurolon. The microscope was then brought into the field, and under the microscope, the cerebellar hemisphere was elevated. Laterally, the arachnoid was very thick. This was opened with bipolar and microscissors and this allowed for the cerebellum to be further mobilized until the tumor was identified. The tumor was quite large and filled up the entire lateral aspect of the right posterior fossa. Initially two retractors were used, one on the tentorium and one inferiorly. The arachnoid was taken down off the tumor. There were multiple blood vessels on the surface, which were bipolared. The tumor surface was then opened with microscissors and the Cavitron was used to began debulking the lesion. This was a very difficult resection due to the extreme stickiness and adherence to the cerebellar peduncle and the lateral cerebellum; however, as the tumor was able to be debulked, the edge began to be mobilized. The redundant capsule was bipolared and cut out to get further access to the center of the tumor. Working inferiorly and then superiorly, the tumor was taken down off the tentorium as well as out the 9th, 10th or 11th nerve complex. It was very difficult to identify the 7th nerve complex. The brainstem was identified above the complex. Similarly, inferiorly the brainstem was able to be identified and cotton balls were placed to maintain this plain. Attention was then taken to try identify the 7th nerve complex. There were multitude of veins including the lateral pontine vein, which were coming right into this area. The lateral pontine vein was maintained. Microscissors and bipolar were used to develop the plain, and

then working inferiorly, the 7th nerve was identified coming off the brainstem. A number 1 and number 2 microinstruments were then used to began to develop the plane. This then allowed for the further appropriate plane medially to be identified and cotton balls were then placed. A number 11 and number 1 microinstrument continued to be used to free up the tumor from the widely spread out 7th nerve. Cavitron was used to debulk the lesion and then further dissection was carried out. The nerve stimulated beautifully at the brainstem level throughout this. The tumor continued to be mobilized off the lateral pontine vein until it was completely off. The Cavitron was used to debulk the lesion out back laterally towards the area of the porus. The tumor was debulked and the capsule continued to be separated with number 11microinstrument as well as the number 1 microinstrument to roll the tumor laterally up towards the porus. At this point, the capsule was so redundant, it was felt to isolate the nerve in the porus. There was minimal bulk remaining intracranially. All the cotton balls were removed and the nerve again stimulated beautifully at the brainstem. Dr. X then came in and scrubbed into the case to drill out the porus and remove the piece of the tumor that was left in the porus and coming out of the porus.,I then scrubbed back into case once Dr. X had completed removing this portion of the tumor. There was no tumor remaining at this point. I placed some Norian in the porus to seal any air cells, although there were no palpated. An intradural space was then irrigated thoroughly. There was no bleeding. The nerve was attempted to be stimulated at the

brainstem level, but it did not stimulate at this time. The dura was then closed with 4-0 Nurolons in interrupted fashion. A muscle plug was used over one area. Duragen was laid and strips over the suture line followed by Hemaseel. Gelfoam was set over this and then a titanium cranioplasty was carried out. The wound was then irrigated thoroughly. O Vicryls were used to close the deep muscle and fascia, 3-0 Vicryl for subcutaneous tissue, and 3-0 nylon on the skin.,The patient was extubated and taken to the ICU in stable condition.