PREOPERATIVE DIAGNOSIS: , Aqueductal stenosis., POSTOPERATIVE DIAGNOSIS:, Aqueductal stenosis., TITLE OF PROCEDURE: , Endoscopic third ventriculostomy., ANESTHESIA:, General endotracheal tube anesthesia., DEVICES:, Bactiseal ventricular catheter with an Aesculap burr hole port., SKIN PREPARATION: ,ChloraPrep.,COMPLICATIONS: , None.,SPECIMENS: , CSF for routine studies., INDICATIONS FOR OPERATION: Triventricular hydrocephalus most consistent with aqueductal stenosis. The patient having a long history of some intermittent headaches, macrocephaly., OPERATIVE PROCEDURE: , After satisfactory general endotracheal tube anesthesia was administered, the patient was positioned on the operating table in supine position with the head neutral. The right frontal area was shaven and then the head was prepped and draped in a standard routine manner. The area of the proposed scalp incision was infiltrated with 0.25% Marcaine with 1:200,000 epinephrine. A curvilinear scalp incision was made extending from just posterior to bregma curving up in the midline and then going off to the right anterior to the coronal suture. Two Weitlaner were used to hold the scalp open. A burr hole was made just anterior to the coronal suture and then the dura was opened in a cruciate manner and the pia was coagulated. Neuropen was introduced directly through the parenchyma into the ventricular system, which was quite large and dilated. CSF was collected for routine studies. We saw the total absence of \_\_\_\_ consistent with the congenital form of aqueductal stenosis and a markedly thinned down floor of the third ventricle. I could bend the ventricular catheter and look back and see the aqueduct, which was quite stenotic with a little bit of chorioplexus near its opening. The NeuroPEN was then introduced through the midline of the floor of the third ventricle anterior to the mamillary bodies in front of the basilar artery and then was gently enlarged using NeuroPEN various motions. We went through the membrane of Liliequist. We could see the basilar artery and the clivus, and there was no significant bleeding from the edges. The Bactiseal catheter was then left to 7 cm of length because of her macrocephaly and secured to a burr hole port with a 2-0 Ethibond suture. The wound was irrigated out with bacitracin and closed using 3-0 Vicryl for the deep layer and a Monocryl suture for the scalp followed by Mastisol and Steri-Strips. The patient tolerated the procedure well.