PREOPERATIVE DIAGNOSIS: , Shunt malfunction.,POSTOPERATIVE DIAGNOSIS: , Partial proximal obstruction, patent distal system.,TITLE OF OPERATION: , Endoscopic proximal and distal shunt revision with removal of old valve and insertion of new.,SPECIMENS: ,None.,COMPLICATIONS:, None.,ANESTHESIA:, General.,SKIN PREPARATION: ,Chloraprep.,INDICATIONS FOR OPERATION: , Headaches, irritability, slight increase in ventricle size. Preoperatively patient improved with Diamox.,BRIEF NARRATIVE OF OPERATIVE PROCEDURE: , After satisfactory general endotracheal tube anesthesia was administered, the patient was positioned on the operating table in the supine position with the head rotated towards the left. The right frontal area and right retroauricular area was shaved and then the head, neck, chest and abdomen were prepped and draped out in the routine manner. The old scalp incision was opened with a Colorado needle tip and the old catheter was identified as we took the Colorado needle tip over the existing ventricular catheter, right over the sleeve on top of it and when that was entered, the CSF poured out around the ventricular catheter. The ventricular catheter was then disconnected from the reservoir and endoscopically explored. We saw it was blocked up proximally. The catheter was a little adherent and required some freeing up with coagulation and on twisting of the ventricular catheter, I was able to free up the ventricular catheter, and endoscopically inserted a new Bactiseal ventricular catheter. The catheter went down to the septum

and I could see both the right and left lateral ventricles and elected to pass it into the right lateral ventricle. It irrigated out well. There was minimal amount of bleeding, but not significant. The distal catheter system was tested. There was good distal run off. Therefore, a linear skin incision was made in the retroauricular area. Tunneling was performed between the two incisions and a ProGAV valve set to an opening pressure of 10 with a 1-5 shunt assist was brought through the subgaleal tissue, connected to the distal catheter and a flushing reservoir was interposed between the burr hole site ventricular catheter and the ProGAV valve. All connections were secured with 2-0 Ethibond sutures. Careful attention was made to make sure that the ProGAV was in the right orientation. The wounds were irrigated out with Bacitracin, closed in a routine manner using Vicryl for the deep layers and Monocryl for the skin, followed by Mastisol and Steri-Strips. The patient tolerated the procedure well. He was awakened, extubated and taken to recovery room in satisfactory condition.