

PREOPERATIVE DIAGNOSIS: , Shunt malfunction. The patient with a ventriculoatrial shunt.,POSTOPERATIVE DIAGNOSIS:, Shunt malfunction. The patient with a ventriculoatrial shunt.,ANESTHESIA: , General endotracheal tube anesthesia.,INDICATIONS FOR OPERATION: , Headaches, fluid accumulating along shunt tract.,FINDINGS: , Partial proximal shunt obstruction.,TITLE OF OPERATION:, Endoscopic proximal shunt revision.,SPECIMENS: , None.,COMPLICATIONS:, None.,DEVICES: , Portnoy ventricular catheter.,OPERATIVE PROCEDURE:, After satisfactory general endotracheal tube anesthesia was administered, the patient positioned on the operating table in supine position with the right frontal area shaved and the head was prepped and draped in a routine manner. The old right frontal scalp incision was reopened in a curvilinear manner, and the Bactiseal ventricular catheter was identified as it went into the right frontal horn. The distal end of the VA shunt was flushed and tested with heparinized saline, found to be patent, and it was then clamped. Endoscopically, the proximal end was explored and we found debris within the lumen, and then we were able to freely move the catheter around. We could see along the tract that the tip of the catheter had gone into the surrounding tissue and appeared to have prongs or extensions in the tract, which were going into the catheter consistent with partial proximal obstruction. A Portnoy ventricular catheter was endoscopically introduced and then the endoscope was bend so that the catheter tip did not go into the same location where it was before, but would take a

gentle curve going into the right lateral ventricle. It flushed in quite well, was left at about 6.5 cm to 7 cm and connected to the existing straight connector and secured with 2-0 Ethibond sutures. The wounds were irrigated out with Bacitracin and closed in a routine manner using two 3-0 Vicryl for the galea and a 4-0 running Monocryl for the scalp followed by Mastisol and Steri-Strips. The patient was awakened and extubated having tolerated the procedure well without complications. It should be noted that the when we were irrigating through the ventricular catheter, fluid easily came out around the catheter indicating that the patient had partial proximal obstruction so that we could probably flow around the old shunt tract and perhaps this was leading to some of the symptomatology or findings of fluid along the chest.