Ventriculo ureteral shunt

The management of ventriculoperitoneal shunt complication or failure is a common problem in neurosurgical practice. On occasion, extraperitoneal sites for CSF diversion are required when shunting to the peritoneal cavity has failed after multiple attempts.

Pillai et al. report a novel minimally invasive procedure allowing cannulation of the ureter for the purpose of ventriculo-ureteral (VU) shunting. Sixteen years prior to presentation, this 46-year-old woman had contracted tuberculous meningitis and had chronic hydrocephalus, with multiple distal shunt failures in recent months. A percutaneous nephrostomy was used to pass the distal catheter based on intraoperative retrograde pyelography. Following successful placement of the VU shunt, the patient's hydrocephalus stabilized and she returned to her regular functional status. The only long-term complication noted within 36 months of follow-up was a transient episode of electrolyte disturbance and dehydration associated with a diarrheal illness that responded to adequate hydration and salt supplementation. By its minimally invasive nature, this approach offers a reasonable extraperitoneal alternative after multiple distal shunt catheter failures have occurred [1)].

1)
Pillai A, Mathew G, Nachimuthu S, Kalavampara SV. Ventriculo-ureteral shunt insertion using percutaneous nephrostomy: a novel minimally invasive option in a patient with chronic hydrocephalus complicated by multiple distal ventriculoperitoneal shunt failures. J Neurosurg. 2017 Mar 17:1-5. doi: 10.3171/2016.8.JNS16342.test. [Epub ahead of print] PubMed PMID: 28306420.