Peritonitis

- Risk Factors, Indications, and Effectiveness of Cerebrospinal Fluid Diversion in Patients With High-Grade Glioma-Associated Hydrocephalus: A Systematic Review and Meta-Analysis
- Surgical Nuances in Ultrasound-Guided Percutaneous Distal Catheter Placement in Pediatric Ventriculoatrial Shunts
- Characterization of Soft Tissue Reconstruction Following Chordoma Resection
- A Comprehensive Review of Arachnoid Cysts
- One year mortality after pediatric hydrocephalus treatment: a comparative analysis of endoscopic third ventriculostomy and ventriculoperitoneal shunt
- Managing hydrocephalus in patients with leptomeningeal disease: A multicenter retrospective analysis
- Impact of acute hydrocephalus after aneurysmal SAH on longitudinal cognitive outcome- post-hoc analysis of the MoCA-DCI study
- Radionuclide Shunt Scintigraphy Technique in Diagnosing Ventriculoperitoneal Shunt Malfunction and Patency: A Case Study and Review of Literature

Bacterial peritonitis is an unusual ventriculoperitoneal shunt complication. This complication, usually associated with peritoneal cysts of perforated viscus, may occur as the first manifestation of ventriculoperitoneal shunt infection. Early recognition of this form of bacterial peritonitis and appropriate antibiotic therapy may avert major abdominal surgery in selected cases [1].

Riccardello et al report the case of 14-year-old girl with a history of myelomeningocele and ventriculoperitoneal shunt-treated hydrocephalus who presented with right-sided abdominal pain and subcutaneous emphysema that developed over a 1-week period. A CT scan of the patient's abdomen revealed a retained distal ventriculoperitoneal (VP) catheter with air tracking from the catheter to the upper chest wall. Given the high suspicion of the catheter being intraluminal, an exploratory laparotomy was performed and revealed multiple jejunal perforations. The patient required a partial small-bowel resection and reanastomosis for complete removal of the retained catheter. Six other similar cases of bowel perforation occurring in patients with abandoned VP and subdural-peritoneal shunts have been reported. The authors analyzed these cases with regard to age of presentation, symptomatic presentation, management, morbidity, and mortality. While there was 0% mortality associated with bowel perforation secondary to a retained distal VP catheter, the morbidity was significantly high and included peritonitis and small bowel resection [2].

1)
Tchirkow G, Verhagen AD. Bacterial peritonitis in patients with ventriculoperitoneal shunt. J Pediatr Surg. 1979 Apr;14(2):182-4. PubMed PMID: 458542.
2)
Riccardello GJ Jr, Barr LK, Bassani L. Bowel perforation presenting with acute abdominal pain and subcutaneous emphysema in a 14-year-old girl with an abandoned distal peritoneal shunt catheter: case report. J Neurosurg Pediatr. 2016 May 6:1-4. [Epub ahead of print] PubMed PMID: 27153375.