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Anal extrusion of the ventriculoperitoneal shunt catheter

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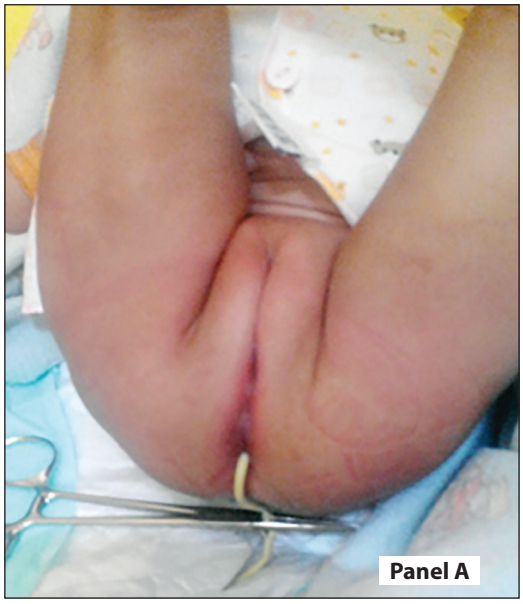

An 11-month-old girl presented with a history of protrusion of a ventriculoperitoneal (VP) shunt through the anus (Panel A). The patient had a history of congenital hydrocephalus since birth and the VP shunt had already been inserted for 6 months. On examination, the child was found to be afebrile with no abdominal or meningeal symptoms. The shunt tube would protrude from the anus upon straining. The neurosurgeon decided to remove the VP shunt. The VP catheter was cut at the abdominal level and gently pulled out by the extruded anal portion. An incision at the head end was made to remove the rest of the shunt. After the procedure the patient was doing well. Abdominal ultrasound showed no evidence of free fluid collection, and there were no signs of peritonitis. VP shunting is most commonly indicated for hydrocephalus; however, there are some complications reported. Bowel perforation and anal extrusion of the distal shunt tube are rare and unusual complications of a VP shunt, and were first reported by Wilson and Bertrand in 1966. So far, to the best of our knowledge, 56 cases have been reported. The exact pathogenesis of shunt tube-related organ perforation is unclear, but various mechanisms have been suggested, including pressure necrosis, foreign body reaction, previous inflammations of the bowel wall, and poor general condition with weak bowel musculature, that may contribute to perforation. Careful attention is recommended so this complication is recognized and surgical removal of the shunt tube considered in the absence of infection, to avoid morbidity and mortality.

Key words: Anal extrusion ▪ VP shunt ▪ Hydrocephalus.

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AFA; Revising it critically for important intellectual content: RGR and AFA; Approved final version of the manuscript: PIG, RGR and AFA.

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