

Ventriculoperitoneal shunt catheter protrusion through the anus: case report of an uncommon complication and literature review

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In this report, Glatstein et al. have presented an 11-year-old girl with rectal protrusion of the ventriculoperitoneal (VP) shunt tube, and they have summarized the 23 cases of anal protrusion of VP shunt reported in the literature.

The most frequent (45%) finding in delayed bowel perforation by VP shunt catheters is protrusion of the distal catheter from the anus [1]. In my opinion, this protrusion seems like a chance for the patient as it helps the early diagnosis of perforation as in the case presented herein.

The authors have also discussed the pathogenesis of delayed bowel perforation by VP shunt catheter. As the authors have indicated, children with myelomeningocele were reported to be more susceptible to bowel perforation, possibly due to their weaker bowel musculature [2]. In the literature, there are also several other explanations, which should have been emphasized in the report. One of those possible mechanisms was proposed by Brownlee et al. [3], and they suggested that allergic reaction to silicone might lead to adherence of shunt tubing to the intestinal wall with subsequent erosion into the lumen. In another report, Miserocchi et al. pointed out that the pathogenesis was most likely to be related with local infective adhesions of the bowel [4]. Among the reasons for

protrusion of the VP catheter from the anus, trauma during the operation should also be taken into consideration. A minor trauma to the bowel may cause a local inflammation which may lead the bowel wall to become more susceptible to the mechanical irritation by the catheter tip. Today, the pathogenesis of delayed bowel perforation by VP shunt catheter is not clear yet. However, we may assume that there is more than one possible mechanism for delayed bowel perforation by VP shunt catheter.

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