

Unusual Shunt Complications



Figure 1 Two unusual shunt complications. A) The peritoneal portion of of the catheter coming out through the anterior abdominal wall , B) the distal catheter protruding from the anus.

Mohan R. Sharma, MS
TU Teaching Hospital
Maharajgunj, Kathmandu
Nepal

Sushil K. Shilpakar, MS
TU Teaching Hospital
Maharajgunj, Kathmandu
Nepal

Address for Correspondence:

Mohan R. Sharma, MS
TU Teaching Hospital
Maharajgunj, Kathmandu
Nepal
Email: mohan@healthnet.org.np

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Case 1. This 12-year old child presented to us with a history of vomiting, irritability and a white tubular structure protruding from the abdomen for three days. The child had undergone placement of a ventriculoperitoneal (VP) shunt nine months previously. On examination, the child had symptoms of shunt malfunction with signs of increased intracranial pressure. Locally the distal part of the shut was exposed in the abdomen (**Figure 1A**). Apparently the distal catheter eroded the abdominal wall and lied externally. The entire shunt was removed and a new shunt system was placed.

Case 2. This 3-year-old child presented to us two years after the placement of a VP shunt for congenital

hydrocephalus with a history of a white tubular structure protruding through anus. On examination child was neurologically normal. Locally there was protrusion of a VP shunt catheter through the anal orifice (**Figure 1B**) with clear fluid dribbling through it. At operation, the peritoneum was opened and the catheter was cut and distal part of the catheter was removed per anally. The proximal part was removed via a separate cranial incision and the child subsequently underwent placement a new VP shunt.

Placement of a VP shunt is still the commonest procedure for treating hydrocephalus. This procedure, though technically not demanding, is associated with a myriad of complications, the commonest being shunt infection and migration.^{1,2,3} A few complications, such as those just described are very rare. Shunt migration is unusual but a notorious complication of shunt placement and is known to migrate into any body cavities. There are several case reports of peritoneal portion of the shunt spontaneously protruding from the anus.^{1,3} Rarer is the report of the catheter eroding through the anterior abdominal wall and lying outside. Though the exact mechanism of how these peculiar complications occur is not known, possible factors include local infective adhesions, a weak abdominal wall or bowel musculature and the use of stiff peritoneal catheters.^{1,3}

References

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