

Scrotal Complications of Ventriculoperitoneal Shunt

Sir,

Scrotal complications of ventriculoperitoneal shunt are very rare which include shunt related inguinal hernia, hydrocele, shunt migration into the scrotum, and shunt extrusion from scrotum. These complications are most frequently reported in a pediatric age group.^[1]

In the majority of the neonates, the processus vaginalis is patent which remains open in half of the children at the age of 1-year. Patent processus vaginalis provides the conduit through which the cerebrospinal fluid travels from the abdominal cavity to the scrotum and causes hydrocele but through the same way, the catheter can migrate to the scrotum too. Children have a smaller peritoneal cavity that associated with high intraabdominal pressure related to cerebrospinal fluid drainage through the ventriculoperitoneal shunt can prolong the patency of processus vaginalis. On the other hand, the younger pediatric patients have a higher tendency to have an inguinal hernia due to the patent processus vaginalis which is amplified by ventriculoperitoneal shunt. Shunt migration into scrotum has been reported almost exclusively in children and only a few cases of distal catheter migration into scrotum have occurred in adult patients.^[1-3]

Furthermore, shunt migration into scrotum associated with an inguinal hernia or without hernia can make more serious complications of acute scrotum, scrotum edema, or even shunt extrusion. The early detection of these rare complications and their correction are essential. The most common management includes the precise closure of the defect, proper repositioning of the distal catheter, and sac repair in cases associated with an inguinal hernia. Surgical repair of hernia in patients with shunt is advised to be done as a bilateral procedure due to associated high intraabdominal pressure and the risk of recurrence. Hence, the other side that seems to be intact is explored, and any defect is repaired. Some authors believe repositioning is not enough and does not prevent from the recurrent migration. Therefore, catheter truncation via laparoscopic approach can be performed to prevent recurrence.

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Conflicts of interest

There are no conflicts of interest.

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