Distal Shunt Exposed Post Ventriculo-peritoneal Shunt at Children with Congenital Hydrocephallus

Case Report

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Abstract

Object. Shunt malfunction at the children with congenital hydrocephalus whom had LCS diversion with ventriculo-peritoneal shunting before was quite common found as the result of shunt failure. But expose from the GI tract is very rare case. We have decribed the history of 3 cases with distal shunt exposed from anal at the children with congenital hydrochepallus post ventriculo-peritoneal shunt.

Methods. This is retrospective case study from 3 patients (age range 11-30 month old) who had admitted to Neurosurgery Department with diagnosis distal shunt exposed post ventriculo-peritoneal shunt due to congenital hydrocephalus. All of patients had shunting operation about 6-10 months before. First sign was tip of shunt came out from their anal and CSF still drips from it. All of patients were performed abdominal plain x-rays and head CT scan for diagnosis. All of CSF was performed culture and sensitivity test and distal part of shunt was removed under general anaesthesia than did external drainage. One patient had cerebral abscess and was performed resection.

Results. Tip of the shunt was came out from the anal, with CSF still produced. The abdominal plain x-rays, the distal part of the shunt entered the colon and the tip came out from anal. One patient had abdominal abscess and cerebral abscess. After surgery there are no sign of infection. After 2 weeks, all patients was performed another VP shunt at the opposite side. Two patients sent home in good condition. One another got high fever, seizure and decrease of consciousness, and fall into septic condition. All patients was performed microbiological examination with the result was staphylococcus and streptococcus.

Conclusion. Shunt exposed can occur anywhere of the body. Even the caused of its still unknown, preoperative patient status and good postoperative observation can avoid further complications. The diagnosis of bowel perforation is often difficult and delayed because anal extrusion of the distal catheter is present in only a minority of cases, and abdominal symptoms are easily overlooked, especially in severely disabled and nonverbal patients. Most bowel perforation is the result of inflammation rather than technical errors.

Key Words. Shunt exposed Ventriculo-peritoneal shunt Congenital Hydrocephallus