Cyst had ruptured, although the spillage was prevented to a significant extent. One year later, she again came with signs of raised ICP for which a contrast enhanced computerized tomography (CT) scan was done [Figure 2]. The scan revealed intraventricular cyst in right frontal horn and another periventricular hydatid cyst in right temporal horn along with hydrocephalus, so a right‑sided ventriculoperitoneal shunt was done. Anticipating shunt may get blocked due to presence of intraventricular cysts, chamber of the shunt (Chhabbra shunt) was cut, and only distal slit valve was kept. Patient improved in the postoperative period. About 6 months later, patient was again admitted with signs of raised ICP and patient was prepared for revision of VP shunt. Intraoperatively, it was found that the shunt tubing was obstructed due to small hydatid cysts. This is the first reported case of VP shunt obstruction by hydatid cyst.

**DISCUSSION**

VP shunt is one of the commonest procedures in neurosurgical practice. A significant problem encountered in shunt procedures is infection, with infection rate ranging from 2% to 27%, often with poor outcome. Shunt-associated infections are most frequently (65%) caused by coagulase-negative *Staphylococcus*. Gram-negative bacteria are the next most frequent pathogens, accounting for 19-22% of cases.[3-7] These infections are the usual cause of the
shunt obstruction which ultimately leads to revision of the shunt. Other well-known causes of the shunt malfunction are obstruction secondary to multiple adhesions in abdomen, omentum, shunt migration, intraventricular hemorrhage, and sometimes even some parasitic infections like neurocysticercosis can even lead to shunt obstruction.\[8\] We are reporting an operated case of cerebral hydatid with VP shunt in situ, presenting with shunt obstruction secondary to small hydatid cysts inside the shunt for which revision of VP shunt was done. The cysts were presumably secondary cysts which had developed secondary to cyst rupture at the primary surgery with protoscolices growing to form the secondary cysts.

Intracranial hydatid cysts are more frequently located in the parenchyma in the supratentorial compartment.\[9\] The other less common sites are skull, cavernous sinus, eye ball, pons, skull, cerebellum, and ventricles. Intraventricular hydatid cyst itself is an uncommon entity and E Keskil\[10\] reported a case of a 7-year-old girl who had a free-floating, intraventricular hydatid cyst, diagnosed by CT examination inside the enlarged left lateral ventricle of an associated Dandy–Walker malformation. The patient underwent surgery and the cyst was removed.

**CONCLUSION**

Though bacterial infection is the most common cause of VP shunt obstruction, but in a patient with hydatid disease of the brain with VP shunt for associated hydrocephalous, the possibility of shunt obstruction secondary to small hydatid cysts itself can be taken into consideration.

**REFERENCES**


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Announcement

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