

Clinical Image

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Giant abdominal cerebrospinal fluid pseudocyst: A rare complication of ventriculoperitoneal shunt**Maria Elena Pugliese***; Riccardo Battaglia; Girolama Raso; Orazio Francesco Antonio Carallo

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Description

Hydrocephalus is a condition that results from increased intracranial pressure. It can be caused by various conditions, including intracranial tumors, brain malformations, as well as disturbances in cerebrospinal fluid production and drainage. However, regardless of etiology, ventriculoperitoneal (VP) shunt is a common procedure used to reduce intracranial pressure. Abdominal cerebrospinal fluid pseudocyst, which is potentially life threatening, is a rare complication [1-4].

We describe the case of a 58 years old woman of our long-term care facility with abnormal abdominal distension and vomiting. The patient suffered of post-intracranial haemorrhage vegetative state with consequent hydrocephalus treated with ventriculoperitoneal shunt placement seven years before. Physical examination revealed a large elastic palpable mass in the lower abdomen. No neurological change was observed. The patient underwent unenhanced abdominal computed tomography (CT). Abdominal CT revealed large homogeneous low-density fluid collection, 30 x 17 cm maximum diameter. The VPS catheter tip was adjacent to the fluid collection, suggesting a giant cystic lesion around the shunt catheter (Figure 1, figure 2 A, B, C). The cystic mass was independent of the pancreas and kidneys. Thus, a peritoneal pseudocyst around the VPS was suspected. The patient underwent surgical evaluation for ultra-

sound-guided cystic aspiration because of poor prognosis that did not allow open surgical treatment.

In conclusion, this report describes an adult case of huge abdominal pseudocyst as a complication of ventriculoperitoneal shunt. Physicians awareness of this rare but possible complication is of crucial importance for early diagnosis and treatment.

References

1. Sena FG, Sousa RM, Meguins LC. Abdominal cerebrospinal fluid pseudocyst: A complication of ventriculoperitoneal shunt in a Brazilian Amazon woman. Case report. *Il Giorn Chir.* 2010; 31: 371-373.
2. Pernas JC, Catala J. Case 72: Pseudocyst around ventriculoperitoneal shunt. *Radiology.* 2004; 232: 239-243.
3. Comba A, Gulenc N, Caltepe G, Dağçınar A, Yüce O, et al. Ascites and abdominal pseudocyst: Two uncommon ventriculoperitoneal shunt complications in two cases. *Turk J Pediatr.* 2013; 55: 655-658.
4. Aparici-Robles F, Molina-Fabrega R, Abdominal cerebrospinal fluid pseudocyst: A complication of ventriculoperitoneal shunts in adults. *J Med Imaging Radiat Oncol.* 2008; 52: 40-43.



Figure 1: Abdominal CT scout-view showing the VPS catheter course (arrow) and abdominal enlargement, with bowel displacement.

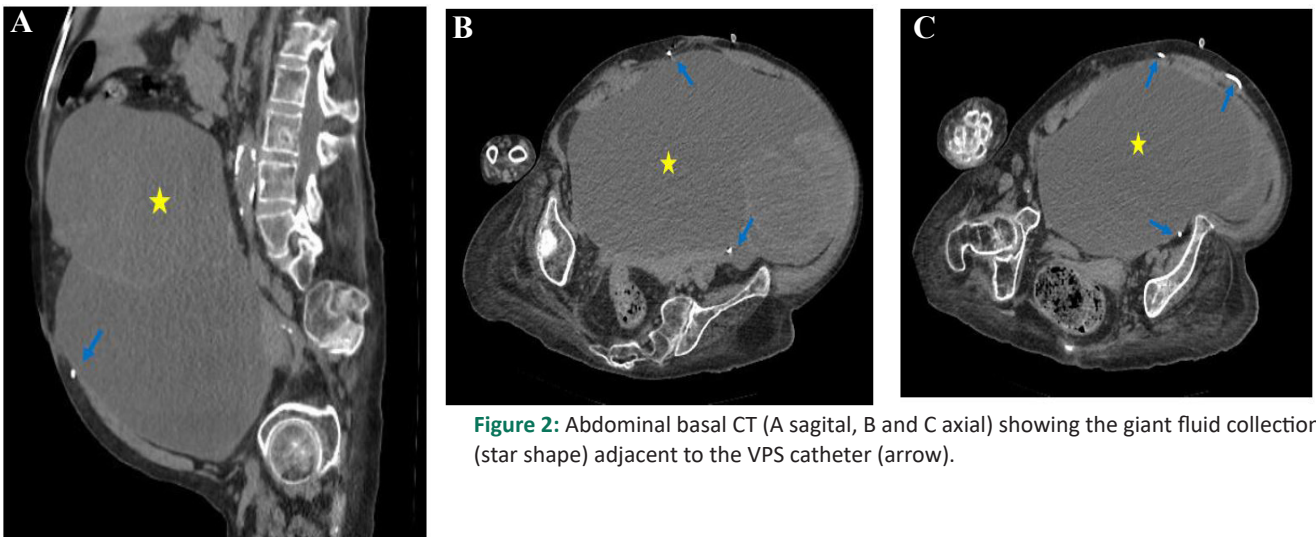


Figure 2: Abdominal basal CT (A sagittal, B and C axial) showing the giant fluid collection (star shape) adjacent to the VPS catheter (arrow).