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P117 - Intraventricular Pneumocephalus: rare complication of a Ventricle-Peritoneal shunt

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Resumen

Introduction: Delayed intraventricular pneumocephalus in shunted patients is rare. We present a case of a patient who underwent Ventricle-peritoneal (VP) shunt surgery who developed delayed pneumoventricle.

Case report: A 66 year old woman was admitted with walking difficulties. She was operated a month prior to her admission for a VP shunt. Head CT showed a vast pneumoventricle. 3 days later she started to leak CSF through the surgical wound. She was operated for revision of the valve and a partially open wound closure. A week later fever and neck stiffness appeared. CSF cultures came positive and urgent removal of the VP shunt system was performed. After 15 days with Vancomycin treatment, CSF culture came negative. Finally, a new VP shunt system was placed with complete reabsorption of the pneumoventricle. The patient was discharged asymptomatic with favorable CT findings.

Discussion: Usually Pneumocephalus is absorbed into the subarachnoid space asymptomatically. CSF shunting has been associated with complications like infections, shunt malfunction and subdural hematomas. Although pneumoventricle is frequent immediately after the shunting procedure, delayed pneumocephalus/pneumoventricle is a rare complication. Most cases of small pneumocephalus don’t require any surgical procedure. Management of pneumocephalus is based on the treatment of elevated ICP, meningitis, shunt management and closure of the main source of air inflow. Few cases are reported showing pneumocephalus as a complication for shunted patients. The present case highlights an uncommon complication of a shunting procedure. After VP shunt system replacement and CSF infection treatment the patient had a satisfactory outcome with complete reabsorption of the pneumocephalus.