2016

Fungal infection following placement of ventriculostomy or ventriculoperitoneal shunt is uncommon. Dadwal et al., report the first case of Alternaria related central nervous system (CNS) shunt infection in a patient with CNS ependymoma manifesting as leptomeningitis and a spinal intradural mass. This case illustrates the diagnostic and management challenges [1)]

2009

A 6-year-old female presented with a large staphylococcal abdominal abscess manifesting as abdominal distension without significant clinical signs or blood and cerebrospinal fluid findings of infection. The patient had undergone repeated surgeries for craniopharyngioma at 2 years of age and had suffered central pontine and extrapontine myelinolysis during the clinical course, had severely impaired hypothalamic function, and was in a vegetative state on presentation. In addition, she had previously suffered epidural, subdural, and cerebral parenchymal abscesses, which had resolved completely. She underwent percutaneous irrigation drainage of pus and removal of the shunt coupled with intense antibiotic administration, which cured the abscess without recurrence. Culture revealed methicillin-resistant Staphylococcus aureus.

Preexisting intracranial infection, which had extended down into the abdominal cavity through the peritoneal tube of the shunt, coupled with the patient's impaired immune function, had probably caused the abdominal abscess. Abdominal abscess is a potential complication of ventriculoperitoneal shunting, and timely diagnosis and treatment may achieve a good outcome [2)].

2005

Phenotypic variants of Staphylococcus aureus may be misidentified by routine microbiological methods, and they may also respond poorly to antibacterial treatment. Using molecular methods, we identified small-colony variants of methicillin-resistant S. aureus (which were misidentified by 3 widely used automated identification systems as methicillin-susceptible coagulase-negative staphylococci) as the cause of recurrent ventriculoperitoneal shunt-related meningitis [3)].

1)
Dadwal SS, Thompson R, Jandial R, Tegtmeier B, Chen MY. Chronic Leptomeningitis and Spinal Intradural Mass Secondary to Alternaria Infection in a Patient with Ventriculoperitoneal Shunt. Case Rep Infect Dis. 2016;2016:4693409. PubMed PMID: 27840750; PubMed Central PMCID: PMC5093234.
2)
Tsutsumi S, Okura H, Suga Y, Akiyama O, Abe Y, Yasumoto Y, Ito M. [Case with large abdominal abscess associated with a ventriculoperitoneal shunt]. No Shinkei Geka. 2009 Apr;37(4):363-7. Japanese. PubMed PMID: 19364027.
3)
Spanu T, Romano L, D'Inzeo T, Masucci L, Albanese A, Papacci F, Marchese E, Sanguinetti M, Fadda G. Recurrent ventriculoperitoneal shunt infection caused by small-colony variants of Staphylococcus aureus. Clin Infect Dis. 2005 Sep 1;41(5):e48-52. Epub 2005 Jul 20. PubMed PMID: 16080075.