Spontaneous Tension Pneumocephalus

Pneumocéfalo Espontâneo Hipertensivo

João Fernandes SERÔDIO, Miguel TRINDADE, Catarina FAVAS

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A 78-year-old man was hospitalized and treated for the third episode of bacterial meningitis, with no etiological agent found. The imaging study for repeated meningitis revealed right tegmen tympani cerebrospinal fluid fistula. During hospitalization he developed sudden coma with no head trauma. Brain computed tomography showed large intraventricular pneumocephalus (Fig. 1). The patient underwent external ventricular drain and fistula surgical repair. The procedure was complicated by epidural hematoma and status epilepticus. Neurological evolution was poor.

Tension pneumocephalus is defined as the presence of air within the skull leading to a rise in intracranial hypertension with rapid neurologic deterioration. Most cases occur due to face and head trauma or surgery, so the occurrence of spontaneous pneumocephalus is very rare. Spontaneous pneumocephalus in association with meningitis is extremely rare, is usually associated with Clostridium perfringens meningitis and rarely with mixed aerobic-anaerobic meningitis. Management relies on surgery and supportive care.

PROTECTION OF HUMANS AND ANIMALS
The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association.

DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.

INFORMED CONSENT
Obtained.

CONFLICTS OF INTEREST
All authors report no conflict of interest.

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REFERENCES