Meningitis with Pneumocephalus Originating from a Sacral Pressure Ulcer

Yosuke Miyaji¹, Takashi Kurokawa¹, Fumiaki Tanaka² and Kazuo Koyama¹

Key words: headache, bacterial meningitis, pneumocephalus, sacral pressure ulcer

(Intern Med 52: 2163-2164, 2013)  
(DOI: 10.2169/internalmedicine.52.0935)

An 86-year-old woman with a sacral pressure ulcer who was in a bedridden state due to terminal dementia was admitted complaining of a headache and fever. She showed an impaired consciousness and meningeal irritation without any other neurological deficits. A cerebrospinal fluid examination revealed leukocytosis (2,500/mm³, 92% polymorphs) and hypoglycorrhachia. Head computed tomography (CT) findings showed multiple air bubbles in the subarachnoid space and the ventricles (Picture 1). The sacral pressure ulcer contained exposed bone, but the dura mater was not visible. The leakage point could not be detected macroscopically (Picture 2a). Spinal CT revealed the presence of a pneumatocele in the spinal canal. In addition, the terminal of the spinal canal formed a fistula at the sacral region through the thin bone cortex (Picture 2b, arrow). These findings were totally resolved following the treatment, which included antimicrobial administration, of the pressure ulcer. We herein report the first case of bacterial meningitis with pneumocephalus where direct radiological evidence is presented concerning the communication between the external air and the spinal canal through a pressure ulcer (1, 2).

The authors state that they have no Conflict of Interest (COI).

References

1. Willheim K, Jurjevic A, Tomic Z. Pneumocephalus as a complica-

²Department of Neurology, Fujisawa City Hospital, Japan and ¹Department of Neurology and Stroke Medicine, Yokohama City University Graduate School of Medicine, Japan

Received for publication May 7, 2013; Accepted for publication May 12, 2013

Correspondence to Dr. Yosuke Miyaji, mmmyosuke@yahoo.co.jp


© 2013 The Japanese Society of Internal Medicine
http://www.naika.or.jp/imonline/index.html