Enterococcus avium Cerebral abscess

Yavuz Pehlivan¹, Mehmet Armagan Toy², Ilkay Karaoglan², Mustafa Namiduru² and Hakan Buyukhatipoglu¹

Key words: Enterococcus avium, cerebral abscess

(DOI: 10.2169/internalmedicine.46.0258)

To the Editor

Dear Sir,

Brain abscess is a focal suppurative process within the brain parenchyma that continues to be one of the most important neurologic emergencies. It has a mortality rate of up to 24% and other major sequelae in up to 70% of the patients (1). The bacteriology of brain abscess is diverse and usually consists of a complex mixture of aerobes and obligate anaerobes. Therefore, accurate identification of species involved is essential to guide determination of the most appropriate therapy (2).

Here, we report an extremely rare case of brain abscess caused by E. avium. A 27-year-old man presenting with confusion, severe headache, vomiting and high fever was admitted to the emergency department. The patient was known to have chronic suppurative otitis media since childhood. He had severe headache and abrupt vomiting. On physical examination, the patient had blood pressure of 100/55 mmHg, the pulse rate of 110/min and the temperature of 37.9°C. He had meningismus, anisocoric pupils. Exudation of fresh pus was seen on examination of the left ear. Laboratory studies were as follows: white blood cell count; 29000/μL (4300-10300) (79% polymorphs), erythrocyte sedimentation rate, 90 mm/h and C-reactive protein, 123 mg/L (0-5). Computed tomography of the brain showed a cerebral abscess in the left temporal lobe.

Left temporal emergency burr hole operation was performed. Thereafter, the cavity was irrigated, wound drainage was performed, and parenteral antibiotics [vancomycin (500 mg i.v. every 6 hours) and ceftriaxone (1 gr i.v. every 12 hours)] were administered to the patient.

Culture of the pus aspirate revealed pure growth of E. avium. Antibiotic therapy consisting of vancomycin (500 mg i.v. every 6 hours) and ceftriaxone (1 gr i.v. every 12 hours) was continued for 6 weeks and the patient’s condition was improved. He was discharged on the 30th postoperative day in a stable condition with a healthy wound and was advised to come for follow-up.

The most feared complication of chronic otitis media is suppurative intracranial complications. Brain abscess is associated with higher mortality. Early neurosurgical intervention is critical to minimize morbidity and mortality in these patients.

In the literature search we found only two cases of brain abscess due to E. avium. Mohanty et al (3, 4) described two cases with chronic ear infection and reported that the chronic ear infection was the predisposing factor for occurrence of the brain abscess due to E. avium. The first patient died due to insufficient treatment, yet the other case recovered completely by effective treatment.

In conclusion, E. avium should be considered as an uncommon etiological agent for brain abscess caused by chronic otitis media, and then the appropriate treatment choice can be selected.

References


© 2007 The Japanese Society of Internal Medicine
http://www.naika.or.jp/imindex.html

¹Departments of Internal Medicine, Gaziantep University School of Medicine and ²Departments of Infectious Diseases, Gaziantep University, School of Medicine, Gaziantep, Turkey

Received for publication April 23, 2007; Accepted for publication April 30, 2007
Correspondence to Dr. Yavuz Pehlivan, drpehlivan@hotmail.com