Brain Abscess Secondary to *Staphylococcus intermedius* in a Previously Healthy Girl

Sağlıklı Bir Kızda *Staphylococcus intermedius’a İkincil Beyin Apsesi*

Deniz Aygün¹, Emre Ceyhun², Ali Kafadar³, Gökhan Aygün⁴, Haluk Çokuğraş¹, Yıldız Camcıoğlu¹

¹ Department of Pediatric Infectious Diseases, Department of Pediatrics, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey
² Department of Pediatrics, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey
³ Department of Neurosurgery, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey
⁴ Department of Medical Microbiology, Istanbul University Cerrahpasa School of Medicine, Istanbul, Turkey

Correspondence / Address/Yazışma Adresi

Deniz Aygün
İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi,
Çocuk Sağlığı ve Hastalıkları Anabilim Dalı,
Çocuk Enfeksiyon Hastalıkları Bilim Dalı,
İstanbul-Türkiye

E-mail: fdenizaygun@gmail.com

A previously healthy, completely vaccinated, four year old girl admitted with tonic clonic seizure. She had the history of fever, headache and vomiting one month before, a week after swimming in pool. She was lethargic and right hemiparetic. The infection markers were increased. The magnetic resonance imaging demonstrated an abscess of 32 x 36 mm in left parietal lobe (Figure 1A,B). Drainage of the abscess was done. Gram staining of the suppurrative material revealed gram-positive cocci and the culture yielded coagulase positive *Staphylococcus intermedius*. Intravenous treatment with vancomycin was ordered for total of 8 weeks until complete resolution of the abscess. The echocardiography, serum immunoglobulin levels, peripheric blood lymphocyte subset and nitroblue tetrazolium test of the patient were all normal. At discharge, child had no clinical sequelae with normal neurological examination and the control imaging of brain.

Brain abscess is a serious infectious disorder with nonspecific and indefinite manifestations that can lead to diagnostic difficulties with unfavorable prognosis. Headache, altered mental status, focal neurological deficit and seizures are the most common presenting signs.

Brain abscess usually develops secondary to contiguous site infections mainly chronic otitis media, mastoiditis, sinusitis and odontogenic infection or following head trauma and neurosurgical procedures. The predominant organisms causing brain abscess in children are aerobic and anaerobic streptococci. *S. intermedius* is rarely reported in central nervous system infections, especially as brain abscess. This microorganism is common colonizer of dogs’ mucosal surfaces and traditionally associated with dog bites. Most of the previous reports of human *S. intermedius* infection have either immunosuppression or chronic disorder like diabetes mellitus. *S. intermedius* is usually susceptible to penicillin, but methicillin resistance is reported.

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Figure 1(A,B): MR image showing brain abscess.