CLINICAL PRACTICE

Clinical Practice: Clinical Images

Pyogenic Brain and Lung Abscesses Due to *Streptococcus intermedius*

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A 36-year-old man with a history of substance abuse was admitted for two days of fever, cough, and confusion. Aside from dental caries, which had worsened due to methamphetamine use, he had no medical history. On examination, he was febrile to 101.0 °F and stuporous with horizontal nystagmus. Laboratory data revealed a leukocytosis of 29,500 cells/mm^3 and a negative HIV screen.

Gadolinium-contrasted magnetic resonance imaging (MRI) of the brain showed two ring-enhancing lesions in the parieto-occipital cortex (Fig. 1), and computed tomography (CT) scan of the chest revealed a cavitary, right lower lobe lung mass (Fig. 2). A CT-guided core biopsy of the lung mass

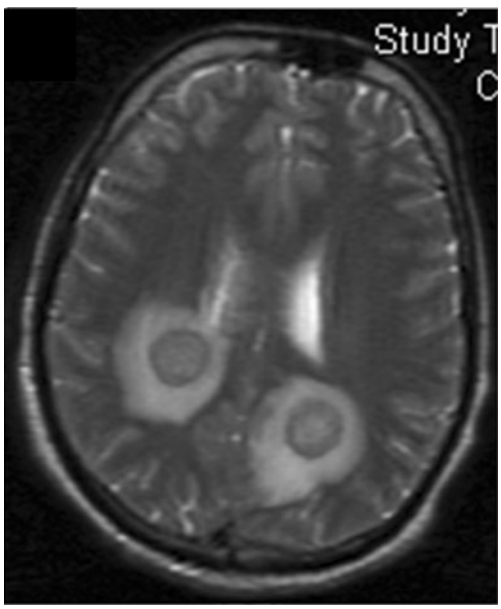

Figure 1. T2-weighted, gadolinium-contrasted MRI of the brain revealing two 2.0 cm ring-enhancing lesions in the parieto-occipital cortex bilaterally with associated vasogenic edema.

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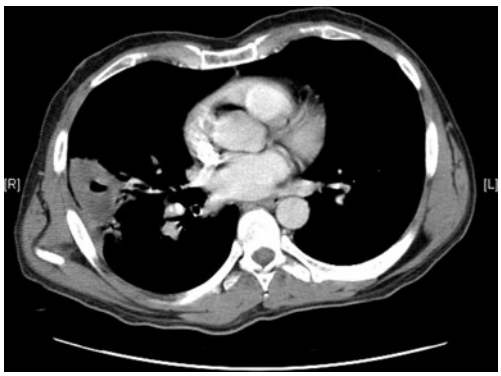

Figure 2. CT of the chest indicating a 5.5 cm, cavitary right lower lobe lung mass.

demonstrated inflammatory debris histologically, with culture yielding *Streptococcus intermedius*.

Oral anaerobes and microaerophilic streptococci are common isolates of concomitant brain-lung abscesses where poor dentition and aspiration underlie pathogenesis.[1] Such infections begin with pneumonia, followed by hematogenous seeding of the cerebral cortex, leading to multiple abscesses in a middle cerebral artery distribution. In contrast, solitary brain abscesses of the frontal lobe develop as a result of sinusitis or odontogenic infection.[2] Successful treatment of brain abscesses usually requires surgical drainage and antimicrobial chemotherapy.[3] The patient underwent stereotactic drainage of both brain abscesses and a course of intravenous antibiotic therapy.

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