Brain Infections

Bacterial Infections

Bacterial infection of the brain is called cerebritis. As cerebritis continues, the infection may coalesce to form a brain abscess (Figure 13). Cerebritis is treated with antibiotics alone. Brain abscesses frequently require surgery for drainage or resection, followed by antibiotics.

Another form of bacterial infection of the brain is subdural empyema. This is bacterial infection within the subdural space. Subdural empyema is rare, and most commonly occurs secondary to severe sinusitis. It is usually a neurosurgical emergency.

Bacterial infection within the CSF compartment is called bacterial meningitis (not all meningitis is bacterial). This is treated with antibiotics. Occasionally bacterial meningitis results in communicating hydrocephalus.

Figure 13: Brain Abscess.

A. MRI scan showing initial presentation of brain abscess.
B. MRI scan showing brain abscess after stereotactic aspiration.
C. MRI scan showing resolving brain abscess (cerebritis) following aspiration and antibiotics.