

SUBDURAL ABSCESS (EMPYEMA)

INDICATIONS AND PATIENT SELECTION

Previously, otitis media was among the leading causes of subdural abscess^[34]; however, over the last several decades it has become more infrequent. One retrospective review of 32 patients with subdural empyema since the 1970s found no cases secondary to otitis media^[35]; another similar series noted that previous craniotomy was the most common risk factor for development of an abscess and had been performed in two thirds of cases. One very large series of 699 cases in a developing country found an otogenic source in about 9% of cases.^[36]

Subdural empyema can develop via thrombophlebitis of small emissary veins traveling from an infected mastoid or middle ear centrally through the dura, where an abscess then develops between the dura and arachnoid. This complication may occur in conjunction with epidural abscess, meningitis, or brain abscess. Most patients have fever and meningismus. Even though focal signs such as hemiparesis will develop in many patients, almost 40% in the large series noted earlier had no focal signs. Empyema can progress rapidly to coma and death; when intracranial pressure rises acutely, papilledema may be absent.^[37] Although imaging evaluation of a patient with suspected intracranial complications of otitis will usually include contrast-enhanced CT, one recent radiologic review recommends diffusion-weighted MRI to help distinguish subdural empyema from a reactive subdural effusion.^[38]

SURGICAL TECHNIQUE

Subdural empyema needs to be evacuated on an emergency basis and the frequently accompanying increase in intracranial pressure carefully monitored via lumbar puncture, along with the intravenous administration of antibiotics. Drainage can be achieved by craniotomy or CT-guided aspiration, in consultation with the neurosurgical service. If the otogenic source is chronic otitis media, mastoidectomy is indicated.