Intracranial Epidural Abscess Treatment

Prompt recognition and surgical evacuation of the collection is essential to the management of epidural abscess. It may be fatal in up to 15% of cases.

Successful treatment of an Intracranial Epidural Abscess (IEA) usually requires a combination of a drainage procedure and antibiotic therapy. Neurosurgical drainage is most commonly performed via burr holes or a craniotomy. If the dura is macerated or breached, a graft or other occlusive approach may be applied.

Sinus-related IEA in children may be managed without neurosurgical procedures if there is adequate sinus drainage (by a surgical or endoscopic drainage procedure) and minimal mass effect from the abscess. This was illustrated in a study of eight children that compared a neurosurgical drainage procedure to sinus drainage without an intracranial procedure

---

Emergency surgical drainage of the epidural abscess or subdural empyema and any underlying fluid in the sinuses should be done.

Pending culture results, antibiotic coverage is the same as antibiotics used to treat brain abscess (eg, cefotaxime, ceftriaxone, metronidazole, vancomycin) except in young children, who may require other antibiotics for any accompanying meningitis (see tables Initial Antibiotics for Acute Bacterial Meningitis and Common IV Antibiotic Dosages for Acute Bacterial Meningitis).

Antiseizure drugs may be required to control seizures but are not usually used prophylactically. Drugs such as mannitol or dexamethasone may be needed if there is evidence of increased intracranial pressure. Hemicraniectomy may be required if intracranial pressure cannot be otherwise controlled.