Purulent meningitis management

- Comparative analysis of clinical characteristics of term and preterm neonates with necrotizing enterocolitis undergoing surgery
- Clinical characteristics and post-operative outcomes in children with purulent meningitis with hydrocephalus: 46 cases in a single center study
- Computed Tomographic and Magnetic Resonance Imaging Diagnosis of Concurrent Sinonasal Aspergillosis and Meningoencephalocele in a Dog
- The role of isoniazid dosage and NAT2 gene polymorphism in the treatment of tuberculous meningitis
- Positive real-time PCR in pneumococcal meningitis 12 hours after initiation of antibiotic therapy - case report
- Case report: Trauma-induced Klebsiella pneumoniae invasive syndrome presenting with liver abscess, lung abscess, endophthalmitis, and purulent meningitis
- Predicting purulent meningitis in very preterm infants: a novel clinical model
- Subarachnoid anesthesia for sacrococcygeal pilonidal disease treatment: A case report

1. Initial Measures

- Ensure ABCs (Airway, Breathing, Circulation)
- Start empirical IV antibiotics immediately after blood cultures:
  - Ceftriaxone or cefotaxime + vancomycin
  - Add ampicillin if *Listeria* is suspected (elderly, neonates, immunocompromised)
- Administer dexamethasone (10 mg IV q6h) ideally before or with first antibiotic dose

2. Diagnostic Workup

- Blood cultures x2
- Lumbar puncture (LP), unless contraindicated:
  - CSF: cell count, glucose, protein, Gram stain, culture, PCR
- CT/MRI before LP if:
  - Altered mental status
  - Focal neurologic signs
  - Signs of raised intracranial pressure

3. Supportive Care

- ICU monitoring for severe cases
- IV fluids and antipyretics
- Anticonvulsants if seizures
- ICP management (mannitol, hypertonic saline, EVD)

4. Targeted Antibiotic Therapy

- Adjust based on culture and sensitivity
- Duration:
  - *N. meningitidis*: 5–7 days
  - *H. influenzae*: 7–10 days
  - *S. pneumoniae*: 10–14 days
  - *Listeria*, *Gram-negatives*: ≥21 days

5. Management of Complications

- **Hydrocephalus** → consider EVD or ventriculoperitoneal shunt
- **Sensorineural hearing loss** → audiology referral
- **Neurological deficits** → rehabilitation, follow-up

Related topics:

- Bacterial meningitis
- External ventricular drainage
- CSF analysis