Algorithm for management of suspected bacterial meningitis in adults and children (Figure 2.1)

Bacterial meningitis suspected

Does patient have any of the following absolute contraindications to lumbar puncture?
- anticoagulant therapy
- bleeding diathesis
- signs of localised spinal sepsis

Yes

No

Does patient have any of the following?

ADULTS
- history of CNS disease
- focal neurological signs
- papilloedema
- new-onset seizure
- abnormal level of consciousness
- immunosuppression

CHILDREN
- focal neurological signs
- papilloedema
- rapidly deteriorating consciousness or obtundation (Glasgow Coma Scale score <8)

None of the above criteria

Any of the above criteria

Blood cultures and lumbar puncture within 30 minutes of initial assessment

Dexamethasone 0.15 mg/kg up to 10 mg IV PLUS empirical antibiotics IV within 30 minutes of initial assessment

CSF findings consistent with bacterial meningitis

Yes

No

Reassess

CT scan shows lumbar puncture not contraindicated

Perform lumbar puncture

ADULTS Perform CT scan

Is Streptococcus pneumoniae suggested on Gram stain or antigen test, or has patient been heavily pretreated with a beta lactam?

No

Continue empirical therapy

Yes

Add vancomycin to empirical therapy

Reassess and treat accordingly

CHILDREN*

CT scan shows lumbar puncture is contraindicated

Blood cultures and lumbar puncture within 30 minutes of initial assessment

Blood cultures within 30 minutes of initial assessment

Blood cultures within 30 minutes of initial assessment

Dexamethasone 0.15 mg/kg up to 10 mg PLUS empirical antibiotics IV within 30 minutes of initial assessment


* CT scans are not routinely performed in children. Review daily, and perform lumbar puncture as soon as the contraindication(s) have resolved. If lumbar puncture is still contraindicated, reassess and treat accordingly.