Empiric treatment of Meningitis – community acquired (ADULTS)

CONSULT ID

IMPORTANT INITIAL CONSIDERATIONS

- Collect Blood and CSF **EMERGENTLY** for microbiology if suspect meningitis
- Do not delay LP and therapy while waiting for CT scan of head (unless altered level of consciousness or focal neuro abnormality)
- If delay in LP, obtain blood cultures before empiric antibiotic therapy

EMPIRIC TREATMENT (Administer in this order)

Ceftriaxone 2 g IV q12 h + **Vancomycin*** 25 mg/kg IV loading dose x 1, then 15 mg/kg IV q8h
+ Dexamethasone 0.15 mg/kg IV q6h start with (or just before) first dose of antibiotics (and continue for 2-4 d)

Do NOT start dexamethasone if antibiotics already begun (worse outcomes)

If over age 50, alcohol use disorder, immunocompromise, pregnancy: **Add Ampicillin** 2 g IV q4h

MOST COMMON BACTERIAL ORGANISMS	DURATION OF TREATMENT
Streptococcus pneumoniae	10 – 14 days
Neisseria meningitidis	7 days
Listeria monocytogenes	21 days (may be longer if immunocompromised)

DATA ON LOCAL RESISTANCE

- *S. pneumoniae* resistance to ceftriaxone < 5% (MUHC data); higher in some parts of Canada and worldwide, therefore recommend to add vancomycin *until susceptibility results*. Discontinue vancomycin if strain is confirmed susceptible to ceftriaxone; continue if resistant to ceftriaxone. *Vancomycin dosage needs strict monitoring, consult Pharmacy
- *N. meningitis* isolates fully susceptible to ceftriaxone; most also susceptible to penicillin
- ***Quickly change to ceftriaxone or penicillin if isolate susceptible***

ADDITIONAL COMMENTS (in consultation with ID)

- Consider fungal meningitis in patients with severe cell-mediated immune compromise
- Consider repeat LP if patient fails to improve after 48 h of therapy
- Consider need for prophylaxis of contacts and additional investigations

REFERENCES

Glimaker et al, Clin infect Dis Jan 2018; 66(3):321-328
Tunkel et al, Clin Infect Dis 2004; 39(9): 1267-84
Van de Beek et al, Clin Micro Infec 2016; 22:S37-62

Approved by ASP committee in September 2019; approved by P&T committee June 3, 2020

MUHC ASP | Antimicrobial Stewardship Program
Centre universitaire de santé McGill | McGill University Health Centre