Galway: GAPP - Galway Antimicrobial Prescribing Policy / Guidelines (GAPP): Suspected Bacterial Meningitis

Suspected Bacterial Meningitis

1. The **most important** aspect of treatment of suspected or confirmed bacterial meningitis is to **commence antibacterial therapy IMMEDIATELY** .
2. Consult with Microbiology or Infectious Diseases is recommended.
3. **Chloramphenicol** is available in the Emergency Department and in the Pharmacy Department. **Meropenem** may be an alternative to chloramphenicol in patients with a history of penicillin anaphylaxis, as recommended in Irish guidelines, with close monitoring for cross-sensitivity e.g. in ICU. Consult with immunology strongly advised.
4. See footnote on use of **Dexamethasone**** .
5. **Consult with Microbiology or Infectious Diseases essential** if risk factors for ***M. tuberculosis*** (alcohol, homelessness, immunocompromised host, recent immigration from area of high incidence, recent contact with tuberculosis) or if history of neurosurgery or head trauma or if device-related infection e.g central nervous system shunt, ventricular drain or other.
6. Risk factors for ***Listeria monocytogenes*** meningitis in adults include underlying neoplasm, immunosuppressive treatment, age over 50, pregnancy and excessive alcohol use.
7. Viral **meningitis** (as distinct from encephalitis) generally does **NOT** require anti-viral treatment. Discuss with Microbiology or Infectious Diseases.
8. See Appendix 3 for management of **contacts.**

Empiric Antibiotics for Suspected Bacterial Meningitis

Infection	1st Line Antibiotics	Penicillin allergy: delayed onset non-severe reaction See penicillin hypersensitivity section for further information	Penicillin allergy: immediate or severe delayed reaction	Comment
Suspected Bacterial Meningitis	CefTRIAXone IV 2g every 12 hours Consider **adding** Vancomycin IV infusion, dose per GAPP App calculator, if Pneumococcal meningitis is likely/suspected. See footnote* re vancomycin review and monitoring. See footnote ** re Dexamethasone. Consider **adding** Amoxicillin IV 2g every 4 hours if at risk for *L. monocytogenes* (See point 6 above)	CefTRIAXone IV 2g every 12 hours Consider **adding** Vancomycin IV infusion, dose per GAPP App calculator, if Pneumococcal meningitis is likely/suspected. See footnote* re vancomycin review and monitoring. See footnote ** re Dexamethasone. Consider **adding** Co-trimoxazole IV 60mg/kg every 12 hours (round dose to nearest multiple of 480mg) if at risk for *L. monocytogenes* (See point 6 above)	Chloramphenicol IV 25mg/kg + Vancomycin IV infusion, dose per GAPP App calculator. See footnote* re vancomycin review and monitoring. Give first dose, THEN IMMEDIATELY **consult** Microbiology or Infectious Diseases regarding further therapy. See footnote ** re Dexamethasone. Consider **adding** Co-trimoxazole IV 60mg/kg every 12 hours (round dose to nearest multiple of 480mg) if at risk for *L. monocytogenes* (See point 6 above) Discuss need for nasopharyngeal eradication for the patient with Microbiology or Infectious Diseases	Minimum duration of treatment: Meningococcal meningitis: 7 days Haemophilus meningitis: 10 days Pneumococcal meningitis: 14 days Listeria meningitis: 21 days

* Review need for ongoing vancomycin on a daily basis. For advice on monitoring see **Vancomycin** Dosing & Monitoring section.

****Dexamethasone**

Consider adjunctive treatment with dexamethasone IV 10mg every 6 hours, particularly if *Pneumococcal* or *Haemophilus influenzae* meningitis suspected, **preferably starting before or with first dose of antibiotic** , but no later than 24 hours after starting antibiotic. Discontinue dexamethasone if a diagnosis other than bacterial meningitis is subsequently made. Discontinue dexamethasone if bacterial meningitis with an organism other than *pneumococcus* or *H.influenzae* is confirmed.

Avoid dexamethasone in septic shock, meningococcal septicaemia, or if immunocompromised, or in meningitis following surgery.

Some experts add **Rifampicin** PO 600mg every 12 hours to the antimicrobial regimen if Dexamethasone is given.

Refs:

1. *HPSC Guidelines for the Early Clinical and Public Health Management of Bacterial Meningitis (including meningococcal disease) November 2016*
2. *ESCMID guideline: diagnosis and treatment of acute bacterial meningitis. Clinical Microbiology and Infection. 2016; 22 (3); S37-S62*
3. *BNF 86 March 2024*
4. *IDSA Guidelines for the Management of Bacterial Meningitis. Clin Infect Dis 2004;39:1267–84*