

Louth: Antimicrobial Guidelines - Louth Hospitals: Antimicrobial Guidelines: Central Nervous System Infections

Indication	
Encephalitis	
First Line Antimicrobials	
Aciclovir 10mg/kg TDS IV	
N.B. Adjust dose if renal impairment .	
N.B. For obese patients (BMI > 30kg/m ²), use of obese-dosing weight (ODW) is recommended.	
Calculate obese-dosing weight (ODW)	
Use of actual body weight can lead to toxicity. Use of ideal body weight can result in under-dosing. Take severity of infection and renal function into account when choosing dose and monitor patient for nephrotoxicity or neurotoxicity when high doses are used.	
Comments	
Microbiological Investigations:	
<ul style="list-style-type: none">Send CSF– request viral PCRConsider possibility of TB infection if immunocompromised	
Public Health notification required for viral encephalitis.	
Duration of Treatment	
14 to 21 days- Discuss all cases with Clinical Microbiology or Infectious Diseases teams	
Indication	
Meningitis	
First Line Antimicrobials	
Cef-TRI-axone 2g BD IV	
AND	
Vancomycin 25mg/kg loading dose (max 3g), followed by 15mg/kg BD IV	
N.B. Adjust dose if renal impairment, trough level monitoring required, click on link above for calculator and guideline.	
AND	
If Listeria meningitis suspected, ADD Amoxicillin 2g four hourly IV	
Risk factors for <i>Listeria spp.</i> include age > 65 years, immunocompromised, pregnant.	
AND	
Dexamethasone phosphate 0.15mg/kg QDS IV (maximum 10mg per dose) started before or with first dose of antimicrobial therapy and continued for 4 days.	
NON-immediate-onset and NON-severe Penicillin Hypersensitivity	
Cef-TRI-axone 2g BD IV	
AND	
Vancomycin 25mg/kg loading dose (max 3g), followed by 15mg/kg BD IV	
N.B. Adjust dose if renal impairment, trough level monitoring required, click on link above for calculator and guideline.	
AND	
If Listeria meningitis suspected, additional cover required:	
<ul style="list-style-type: none">If patient NOT pregnant, ADD Co-trimoxazole 120mg/kg daily IV, given in divided dosesIf patient IS pregnant, use entire regimen for immediate-onset or severe penicillin hypersensitivity below instead	
Risk factors for <i>Listeria spp.</i> include age > 65 years, immunocompromised, pregnant	
AND	
Dexamethasone phosphate 0.15mg/kg QDS IV (maximum 10mg per dose) started before or with first dose of antimicrobial therapy and continued for 4 days.	
IMMEDIATE-onset or SEVERE Penicillin Hypersensitivity	
Meropenem 2g TDS IV	
N.B. Use meropenem with caution and close clinical monitoring if history of immediate-onset penicillin hypersensitivity - approximately 1% risk of immediate-onset hypersensitivity reaction to meropenem.	
AND	
Vancomycin 25mg/kg loading dose (max 3g), followed by 15mg/kg BD IV (Do not load pregnant patients)	
N.B. Adjust dose if renal impairment, trough level monitoring required, click on link above for calculator and guideline.	
AND	
Dexamethasone phosphate 0.15mg/kg QDS IV (maximum 10mg per dose) started before or with first dose of antimicrobial therapy and continued for 4 days.	
This regimen covers <i>Listeria spp.</i>	
Comments	
ALWAYS:	
<ul style="list-style-type: none">CONTACT Clinical Microbiologist or ID Consultant for adviceREVIEW empiric therapy in conjunction with C&S after 48 hours.	
Microbiological Investigations:	
<ul style="list-style-type: none">Blood culturesCSFEDTA blood sample for meningococcal, pneumococcal and haemophilus PCRThroat swab to detect carriage of <i>N. meningitidis</i>Consider possibility of viral infectionConsider possibility of TB infection if immunocompromised	
Public Health notification required for meningitis caused by <i>N. meningitidis</i> , <i>H. influenzae</i> , <i>S. pneumoniae</i> , <i>Listeria spp.</i> and viral meningitis.	
N.B. See chemoprophylaxis for meningococcal contacts .	
Duration of Treatment	
Duration depends on causative organism:	
<ul style="list-style-type: none"><i>N. meningitidis</i> : 7 days<i>H. influenzae</i> : 10 days<i>S. pneumoniae</i> : 14 days<i>Listeria spp.</i> : 21 days	