2014 CPS Guidelines on management of paediatric meningitis.
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TABLE 1 Recommended antimicrobials for suspected and proven bacterial meningitis in children >1 month of age		
	Recommended therapy	
Empirical treatment (pending blood and cerebrospinal fluid cultures)		
	Ceftriaxone OR cefotaxime AND vancomycin ADD ampicillin to cover *Listeria* if patients are at risk because they are immunocompromised	
Blood and CSF cultures negative or not performed, but a diagnosis of bacterial meningitis is supported by clinical course and laboratory investigations (including cases detected using molecular methods)		
	Ceftriaxone OR cefotaxime, without vancomycin* *Vancomycin could be continued if there is local epidemiological evidence of third-generation cephalosporin resistance of *Streptococcus pneumoniae*	
Specific bacteria	**Recommended treatment**	**Alternative therapy**
***S pneumoniae* (culture positive)**		
Penicillin susceptible (MIC ≤0.06 µg/mL)	Penicillin G or ampicillin	Cefotaxime, ceftriaxone
Penicillin resistant (MIC ≥0.12 µg/mL) AND ceftriaxone or cefotaxime susceptible (MIC ≤0.5 µg/mL)	Ceftriaxone or cefotaxime	Meropenem
Penicillin resistant (MIC ≥0.12 µg/mL) AND ceftriaxone or cefotaxime intermediate or fully resistant (MIC ≥1.0 µg/mL)	Ceftriaxone or cefotaxime AND vancomycin* *Consult an infectious disease expert	Meropenem
Neisseria meningitidis		
Penicillin susceptible (MIC <0.12 µg/mL)	Penicillin G or ampicillin	Ceftriaxone or cefotaxime
Penicillin resistant (MIC ≥0.12 µg/mL)	Ceftriaxone or cefotaxime	
Haemophilus influenzae		
Ampicillin susceptible	Ampicillin	
Ampicillin resistant	Ceftriaxone or cefotaxime	
Streptococcus agalactiae **(Group B streptococci [GBS])**	Penicillin G or ampicillin; ADD gentamicin for the first 5 to 7 days or until cerebrospinal fluid sterility confirmed	
Other organisms	Consult an infectious disease expert	
MIC Minimum inhibitory concentration		

If there are no contraindications to steroid use for a particular infant or child, when a meningitis of bacterial etiology is suspected (especially if the CSF Gram stain indicates Gram-positive diplococci or Gram-negative coccobacilli), some experts recommend starting intravenous steroids: dexamethasone at a dose of 0.6 mg/kg/day in four divided doses administered every 6 h immediately before, concomitant with, or within 30 min after the first dose of antimicrobials. If *S pneumoniae* or Hib is cultured or identified by molecular testing, steroids should be continued for a total duration of two days. If another etiology is identified within 48 h, steroids should be discontinued – there has been no benefit identified in continuing steroids for other causes. In some cases, there is a rebound of fever after steroids are discontinued, but if all other parameters indicate improvement and the clinical diagnosis continues to support bacterial meningitis alone, fever is not an indication for additional testing.

At present, there is insufficient information available to recommend other types of adjuvant therapy.

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TABLE 2 Recommended doses for antimicrobials used to treat suspected or confirmed bacterial meningitis

Antimicrobial	Dose	Route
Ceftriaxone	100 mg/kg/day in 2 divided doses administered every 12 h (some experts recommend a loading dose of 100 mg/kg followed 12 h later by another dose, then 100 mg/kg/day in 2 divided doses administered every 12 h) Maximum dose 4 g/day	Intravenous (intramuscular route can be used if intravenous route is not immediately available)
Cefotaxime	300 mg/kg/day in 4 divided doses administered every 6 h Maximum dose 8 g/day to 12 g/day	Intravenous
Vancomycin	60 mg/kg/day in 4 divided doses administered every 6 h To achieve trough concentrations of 10 mg/L to 15 mg/L	Intravenous
Penicillin G	300,000–400,000 units/kg/day in divided doses administered every 4 h to 6 h Maximum dose 24 million units/day	Intravenous
Ampicillin	300 mg/kg/day in divided doses administered every 4 h to 6 h Maximum dose 12 g/day	Intravenous
Meropenem	120 mg/kg/day in divided doses administered every 6 h to 8 h Maximum dose 6 g/day	Intravenous