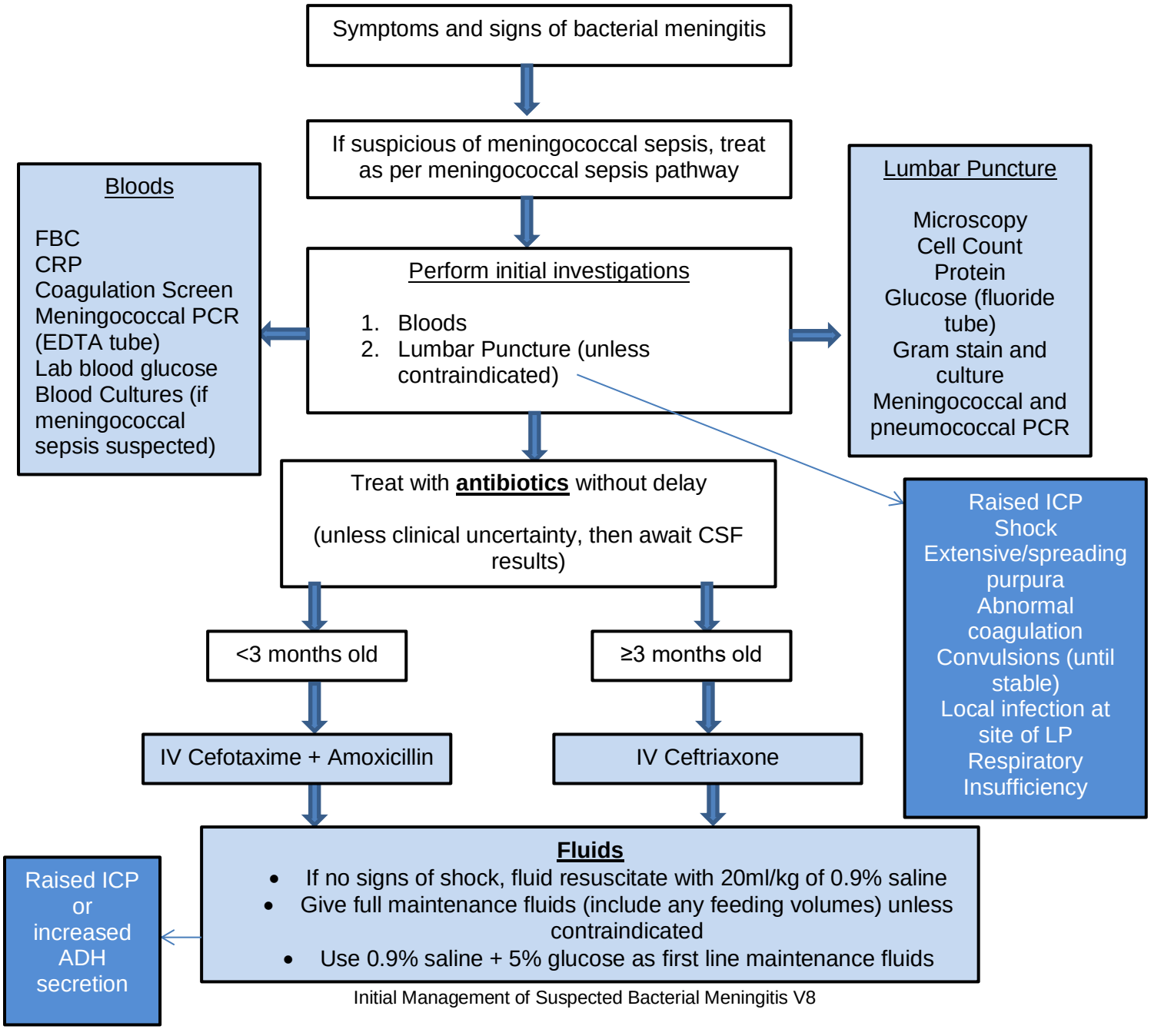
NHS Worcestershire Acute Hospitals NHS Trust

Initial Management of Suspected Bacterial Meningitis

Key Document code:	WAHT-TP-062	
Key Documents Owner:	Dr V Weckemann	Consultant Paediatrician
Approved by:	Paediatric Quality Improvement meeting	
Date of Approval:	9th March 2024	
Date of review: **This is the most current version and should be used until a revised document is in place**	9th March 2027	

Key Amendments

Date	Amendment	Approved by
23rd September 2019	Change of wording in Infectious diseases box – grey fluoride tube to fluoride tube	Dr T Dawson/Dr J West
19th Nov 2020	Document extended for 1 year	Dr J West/ Paediatric QIM
26th March 2021	Approved with no amendments	Paediatric QIM
9th March 2024	Document reviewed and amended to include reference and link to NICE CG102	Paediatric Governance Meeting



Indications for **CT head**?

- GCS ≤ 8
- GCS drop of ≥ 3
- Focal neurological signs

If CT scan indicated, do not delay antibiotics for scanning

Indications for **steroids**?

If ≥ 3 months of age + < 12 hours from 1st antibiotic dose, if LP shows:

- Frankly purulent CSF
- CSF WCC > 1000/µl
- Raised CSF WCC +protein >1g/l
- Bacteria on Gram stain

Consider need for tracheal intubation, mechanical intervention and intensivist input

Lumbar puncture suggesting meningitis

- Neonates (≤ 28 days old) - ≥ 20 cells/µl
- Older children - > 5 cells/µl or > 1 neutrophil/µl
- Non-specific abnormal CSF + raised blood CRP and/or WCC

Monitoring

- Fluid balance
- Signs of raised ICP & GCS
- Blood glucose
- U&Es daily whilst on IV fluids

Duration of antibiotic therapy

Specific pathogen confirmed

< 3 months of age:

- Group B strep – IV Cefotaxime for ≥ 14 days
- Listeria monocytogenes – IV amoxicillin for 21 days + IV Gentamicin for ≥ first 7 days
- Gram-negative bacilli – IV Cefotaxime for ≥ 21 days

≥ 3 months of age:

- N.meningitidis – IV Ceftriaxone for 7 days
- H.influenzae - IV Ceftriaxone for 10 days
- S.pneumoniae - IV Ceftriaxone for 14 days

Unknown pathogen/unconfirmed infection

<3 months old → IV Cefotaxime +IV Amoxicillin for ≥ 14 days

≥3 months old → IV Ceftriaxone for ≥ 10 days

Other considerations for antibiotic therapy

- Consider **TB meningitis** if raised CSF WCC and risk factors for TB
- If Herpes Simplex meningoencephalitis is considered, give **aciclovir**
- Add **vancomycin** if recently overseas, or prolonged/multiple antibiotic exposure in past 3 months

Long-term management

- Arrange formal audiological assessment prior to discharge
- On discharge, provide patients/parents with written information regarding potential long term effects of bacterial meningitis
- Offer contact details of patient support organisations
- Follow up appointments with paediatrician within 4-6 weeks of discharge

References:

1. Meningitis (bacteria) and Meningococcal Septicaemia in under 16s: Recognition, Diagnosis and Management. NICE Guidelines CG102. **https://www.nice.org.uk/guidance/cg102**