

Guideline for Children who present with non-blanching rash in Calderdale and Huddersfield Emergency Departments

Background:

Meningococcal B & C vaccines were introduced in the UK in 2015 and 1999.

Previous research prior to the introduction of vaccination suggested a prevalence of 10-20% of meningococcal disease in children presenting with fever and non-blanching rash. As a result of the above much of the treatment protocols and guidelines for the management of children presenting with fever and non-blanching rash focussed on investigations and administering early antibiotics.

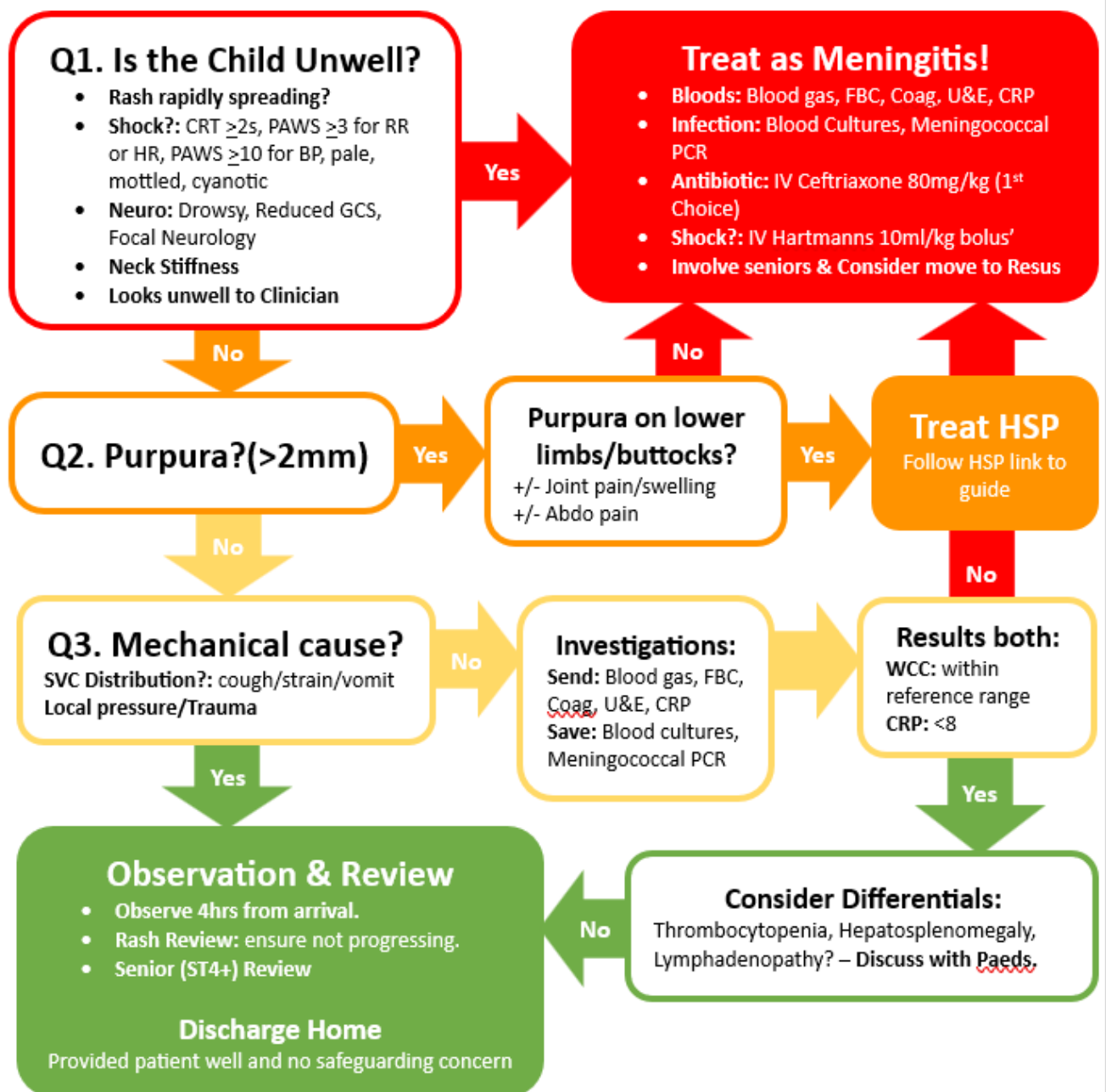
The 'PIC' study, 'Petechiae in Children', was published in the Lancet in 2020 (1). The study looked at 1324 children who presented with the presence of both a fever (>38degrees) and a non-blanching rash to 37 different Emergency Departments (ED) in the UK over a time period of 16months.

The study found that just 1% of these patients had meningococcal disease.

The study compared several different guidelines in use for the management of children presenting with non-blanching rash and fever. The BARTs health trust guideline was shown to have a 100% sensitivity and 36% specificity at identifying the children who presented with meningococcal disease.

We have therefore chosen to adapt this guideline/ flowchart for use in CHFT.

The below flowchart should be used for ALL children who present with non-blanching rash +/- fever to the ED.



Management of the children with suspected meningococcal septicaemia

- Consider moving to Resus
- Assessment looking for shock/raised ICP
- Iv access, blood tests, Give IV Ceftriaxone (80 mg/kg od) without delay
- Ensure Senior in ED is aware, Call Paediatrics, Consider Anaesthesia or Intensive Care if evidence of shock

See meningitis research foundation guideline for the full management:

<https://www.meningitis.org/getmedia/8e76b051-8e9e-41bf-8a63-adcff1f698cb/Meningococcal-Disease-Child-Algorithm-Oct-2017>

Differential Diagnoses:

- Thrombocytopenia
- Acute Leukaemia
- Haemolytic uraemic syndrome
- Viral Illness
- Mechanical
- HSP
- Trauma or Non-accidental injury

References:

(1): Validating clinical practice guidelines for the management of children with non-blanching rashes in the UK (PiC): a prospective, multicentre cohort study. Waterfield, T. Maney, JA. Fairley, D. Lyttle, MD. McKenna, JP. The Lancet, 01/04 2021.