Diarrhoea and/or Vomiting (Gastroenteritis) Pathway

Clinical Assessment / Management for Children with suspected Gastroenteritis

Management - Primary Care and Community Settings

**SUSPECTED GASTROENTERITIS**

**History**
- Assessment of Vital Signs - Temp, Heart Rate, RR, capillary refill time
- Consider differential diagnosis

**Risk factors for dehydration - see figure 1**

**Do the symptoms and/or signs suggest an immediately life threatening (high risk) illness?**

- Yes
  - Refer immediately by emergency ambulance
    - Alert Paediatrician
    - Stay with child whilst waiting and prepare documentation
  - Discuss with Paediatrician

- No
  - Consider alternative diagnoses to gastroenteritis if:
    - Fever (>38) • Shortness of breath • Altered consciousness • Signs of meningism • Blood in stool • Bilious (green) vomit
    - Vomiting alone • Recent head injury • Recent burn • Severe localised abdominal pain • Abdominal distension or rebound tenderness
    - Consider diabetes

**Consider differential diagnosis**

| Risk factors for dehydration - see figure 1 |

**Urgent Action**

- Refer immediately to emergency care - consider emergency ambulance
  - Alert Paediatrician
  - Consider initiating Management of Clinical Dehydration [Fig 2] awaiting transfer
  - Consider commencing high flow oxygen support

**Green Action**

- Provide Written and Verbal advice (see patient advice sheet)
  - Continue with breast and / or bottle feeding
  - Encourage fluid intake, little and often e.g. 5mls every 5 mins
  - Children at increased risk of dehydration (see Fig 1)
  - Confirm they are comfortable with the decisions / advice given

**Amber Action**

- Begin management of clinical dehydration algorithm [see Fig 2]
  - Agree a management plan with parents +/- seek advice from paediatrician
  - Consider referral to acute paediatric community nursing team if available
  - Check blood glucose

**Table 1**

<table>
<thead>
<tr>
<th>Clinical Findings</th>
<th>Green - low risk</th>
<th>Amber - intermediate risk</th>
<th>Red - high risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Over 3 months old</td>
<td>Under 3 months old</td>
<td></td>
</tr>
<tr>
<td>Behaviour</td>
<td>Responds normally to social cues</td>
<td>Altered response to social cues</td>
<td>No response to social cues</td>
</tr>
<tr>
<td>Skin</td>
<td>Normal skin colour</td>
<td>Normal skin colour</td>
<td>Pale / mottled / blue</td>
</tr>
<tr>
<td>Hydration</td>
<td>CRT &lt; 2 secs</td>
<td>CRT 2-3 secs</td>
<td>CRT &gt; 3 secs</td>
</tr>
<tr>
<td>Urine output</td>
<td>Normal urine output</td>
<td>Reduced urine output / no urine output for 12 hours</td>
<td>No urine output for &gt;24 hours</td>
</tr>
<tr>
<td>Respiratory</td>
<td>Normal breathing pattern and rate*</td>
<td>Normal breathing pattern and rate*</td>
<td>Abnormal breathing / tachypnoea*</td>
</tr>
<tr>
<td>Heart Rate</td>
<td>Heart rate normal</td>
<td>Tachycardia: HR &gt; 150 beats/min if age 1-2 years; HR &gt; 140 beats/min if age 3-5 years; HR &gt; 120 beats/min if 6-11 years; HR &gt; 100 beats/min if age &gt;12 years;</td>
<td>Weak peripheral pulses</td>
</tr>
<tr>
<td></td>
<td>Peripheral pulses normal</td>
<td>Peripheral pulses normal</td>
<td></td>
</tr>
<tr>
<td>Eyes</td>
<td>Not sunken</td>
<td>Sunken Eyes</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Additional parent/carer support required</td>
<td></td>
</tr>
</tbody>
</table>

**Fig 1** Children at increased risk of dehydration are those:
- Aged <1 year old (and especially the < 6 month age group)
- Have not taken or have not been able to tolerate fluids before presentation
- Have vomited three times or more in the last 24 hours
- Has had six or more episodes of diarrhoea in the last 24 hours
- History of faltering growth

**Fig 2** Management of Clinical Dehydration
- Fluid trial – Dilute apple juice/ORL 5ml every 5 mins
- Consider Ondansetron 0.1mg/kg PO/sublingual (max 4mg) if continued vomiting in context of suspected gastroenteritis
- If fluids not tolerated or hydration not improved within 2 hours please refer to paediatric team
- If fluids tolerated and hydration improves proceed to green action with consideration of referral to acute paediatric community nursing team if available

*Normal paediatric values (APLS)*:

<table>
<thead>
<tr>
<th>(APLS)</th>
<th>Respiratory Rate at rest: [b/min]</th>
<th>Heart Rate [bpm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 year</td>
<td>30 - 40</td>
<td>110 - 160</td>
</tr>
<tr>
<td>1-2 years</td>
<td>25 - 35</td>
<td>100 - 150</td>
</tr>
<tr>
<td>&gt;2-5 years</td>
<td>25 - 30</td>
<td>95 - 140</td>
</tr>
<tr>
<td>5-12 years</td>
<td>20-25</td>
<td>80 - 120</td>
</tr>
<tr>
<td>&gt;12 years</td>
<td>15-20</td>
<td>60-100</td>
</tr>
</tbody>
</table>

This document was arrived at after careful consideration of the evidence available including but not exclusively NICE, SIGN, EBM data and NHS evidence, as applicable. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient in consultation with the patient and / or carer.

First Draft Version: May 2011
Date of this Refreshed Version: July 2022
Review Date: April 2024

This guidance was written in collaboration with the SE Coast SCN and involved extensive consultation with healthcare professionals in Wessex.