Clinical Assessment / Management Tool for Children with suspected Gastroenteritis





Management - Acute Setting

Patient presents
with or has
a history of
diarrhoea and /
or vomiting

Triage

Assessment including PEWS Score Temp, Heart Rate, RR, CRT, O2 Sats, BP, Blood Glucose (if indicated)

Nursing Assessment -History Hydration Antipyretics Start oral rehydration solution (ORS)

Try to isolate to limit cross infection

Risk factors for dehydration - see figure 3

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

Yes

Contact Lead ED / Paediatric Doctor

Move to Resuscitation Area [see Fig 1]

Resus Call ("2222") for Paediatric Arrest

Discuss with Lead ED / Paediatric Doctor

Consider any of the following as possible indicators of diagnoses other than gastroenteritis:

• Fever: Temperature of > 38°C • Shortness of breath • Altered state of 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

Table 1 Clinica

Clinical Findings	Green - low risk	Amber - intermediate risk	Red - high risk
Age	Over 3 months old	Under 3 months old	
Behaviour	Responds normally to social cues Content / smiles Stays awake / awakens quickly	Altered response to social cues No smile	No response to social cues
	Strong normal crying / not crying Appears well	Decreased activityIrritableLethargic	Unable to rouse or if roused does not stay awake
		Appears unwell	Weak, high pitched or continuous cry Appears ill to a healthcare professional
Skin	Normal skin colour Warm extremities Normal turgor	Normal skin colour Warm extremities Reduced skin turgor	Pale / mottled / ashen blue Cold extremities
Hydration	CRT < 2 secs Moist mucous membranes (except after a drink) Fontanelle normal	 CRT 2-3 secs Dry mucous membranes (except for mouth breather) Sunken fontanelle 	• CRT> 3 secs
Urine output	Normal urine output	Reduced urine output / no urine output for 12 hours	No urine output for >24 hours
Respiratory	Normal breathing pattern and rate*	Normal breathing pattern and rate*	Abnormal breathing / tachypnoea*
Heart Rate	Heart rate normal Peripheral pulses normal	Mild tachycardia* Peripheral pulses normal	Severe tachycardia*
Eyes	Not sunken	Sunken Eyes	
Other		Additional parent/carer support required	

Fig 1 Management when clinical shock suspected

- · Check blood glucose and blood gas
- Give 20 ml/kg 0.9% Sodium Chloride IV / IO
- → Reassess
- → Second Bolus 20 ml/kg 0.9% NaCl
- → Reassess
- Consider contacting PICU (SORT 023 8077 5502)

Fig 2 Management of Clinical Dehydration

- Trial of oral rehydration fluid (ORS) 2 mls/kg every 10 mins consider giving ORS via nasogastric tube if the child is unable to drink or vomits persistently
- Consider checking blood glucose, esp in <6 month age group
- Consider referral to <u>acute paediatric community nursing team</u> if available
- Reintroduce breast/bottle feeding as tolerated
- Continue ORS if ongoing losses
- ED if child fails to improve within 2 hours and remains within amber category, refer to paediatric team

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Fig 3 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 past 24 hours
- History of faltering growth

Common a relief

Common

For all patients, continue monitoring following PEWS Chart recommendation

Green Action

Provide Written and Verbal advice (see patient advice sheet)
Continue with breast and / or bottle feeding
Encourage fluid intake, little and often

Children at increased risk of dehydration [see Fig 3] Confirm they are comfortable with the decisions / advice given and then think "Safeguarding" before sending home

Amber Action

Begin management of clinical dehydration algorithm [see Fig 2]
Consider Blood Glucose

Advice from <u>Lead ED / Paediatrician</u> should be sought

Advice from Lead ED / Paediatrician should be sought and/or a clear management plan agreed with parents. Consider referral to acute paediatric community nursing team if available

Urgent Action

Immediate Paediatric Assessment

If clinical shock suspected or confirmed follow management plan [see Fig 1]

*Normal paediatric values:

t rest: [b/min]	[bpm]
30 - 40	110 - 160
25 - 35	100 - 150
25 - 30	95 - 140
20-25	80-120
15-20	60-100
	30 - 40 25 - 35 25 - 30 20-25

† Advanced Paediatric Life Support The Practical Approach Fifth Edition Advanced Life Support Group Edited by Martin Samuels; Susan Wieteska Wiley-Blackwell / 2011 BMJ Books.

GMC Best Practice recommends: Record your fin (See "Good Medical Practice" http://bit.lv/1DPXI2I

Diarrhoea and/or Vomiting (Gastroenteritis) Pathway Clinical Assessment / Management Tool for Children with suspected Gastroenteritis





Management - Acute Setting

Glossary of Terms		
ABC	Airways, Breathing, Circulation	
APLS	Advanced Paediatric Life Support	
AVPU	Alert Voice Pain Unresponsive	
B/P	Blood Pressure	
CPD	Continuous Professional Development	
CRT	Capillary Refill Time	
ED	Hospital Emergency Department	
GCS	Glasgow Coma Scale	
HR	Heart Rate	
MOI	Mechanism of Injury	
PEWS	Paediatric Early Warning Score	
RR	Respiratory Rate	
WBC	White Blood Cell Count	