

Acute Gastroenteritis

BACKGROUND

- Very common
- Rotavirus is the most common cause
- Vomiting usually precedes diarrhoea
- In most cases, vomiting lasts for 1-2 days and diarrhoea lasts for 5-7 days
- Fever and abdominal pain also seen
- Very few have >3% dehydration in Europe

PILLARS OF MANAGEMENT

- Use of oral rehydration solution (ORS)
- Rapid reintroduction of usual feeds and solids
- If persistent diarrhoea give extra ORS
- Avoid antiemetics, antidiarrhoeals and antibiotics
- Special formulae for bottle fed infants are not required
- Appropriate hand-washing is essential to prevent spread of infection

ORAL REHYDRATION SOLUTION

- ORS replaces fluid & electrolytes and prevents dehydration
- Constituents:
 - ✓ 60 mmol/L sodium
 - ✓ 90 mmol/L glucose
 - ✓ 20 mmol/L potassium
 - ✓ 10 mmol/L citrate

REFERENCES

- NICE Guidelines CG84 April 2009: *Diarrhoea and vomiting in children*

HISTORY

- Sudden onset vomiting & diarrhoea
- Abdominal pain
- Fever
- Assess risk of dehydration
 - ✓ Vomit & stool frequency
 - ✓ Urine output
- Sick contacts
- Known source of infection (contaminated food/water)
- Recent travel

EXAMINATION

- Measure weight
- Vital signs
- Hydration status
- Abdominal exam

INVESTIGATIONS

- Few require investigation
- Stool microbiology rarely needed

TREATMENT

- ORS given by spoon every 15 minutes over 3-4 hours
- More ORS if diarrhoea persists
- Avoid starvation & flat 7-up
- Avoid anti-diarrhoeals and antibiotics

TAKE HOME MESSAGES

- If >4 vomits and/or >8 stools per day, a child should be assessed
- Do not give soft drinks or sweetened fruit drinks
- Avoid use of antiemetics including motilium (risk of dystonic reactions)
- Reintroduce solids promptly
- May have post-gastroenteritis diarrhoea for >2 weeks (rarely relates to lactose intolerance)

REFERRAL

- Persistent vomiting & inability to tolerate oral fluids
- Moderate to severe dehydration
- Severe abdominal pain or tenderness
- Bilious vomiting

ASSESSING HYDRATION

- Mild dehydration (<5%)
 - ✓ Alert
 - ✓ CRT <2 seconds
 - ✓ Moist mucous membranes
 - ✓ Normal skin turgor
 - ✓ Decreased urine output
 - ✓ Mildly increased HR
 - ✓ Normal pulse volume & BP
- Moderate dehydration (6-10%)
 - ✓ Lethargic
 - ✓ CRT 2-4 seconds
 - ✓ Dry mucous membranes
 - ✓ Slow skin turgor
 - ✓ Depressed fontanelle (infants)
 - ✓ Sunken eyes
 - ✓ Oliguria
 - ✓ Moderately increased HR
 - ✓ Thready pulse
 - ✓ Normal or low BP
- Severe dehydration (11-15%)
 - ✓ Obtunded
 - ✓ CRT >4 seconds
 - ✓ Parched mucous membranes
 - ✓ Tenting skin turgor
 - ✓ Sunken fontanelle (infants)
 - ✓ Very sunken eyes
 - ✓ Anuria
 - ✓ Severely increased HR
 - ✓ Faint pulse
 - ✓ Low BP