

## GASTRO-OESOPHAGEAL REFLUX DISEASE

Well looking:

**Infant** presents with +/- regurgitation/vomiting.  
**Older child** presents with heartburn, retrosternal or epigastric pain

**History:**

- age at onset of vomiting/regurgitation
- frequency
- other symptoms e.g crying during feed
- feeding/dietary history
- birthweight & current
- previous treatment

**Examination**

**Are there any Red Flag symptoms?**

- Frequent, forceful (projectile) vomiting
- Bile-stained (green or yellow-green) vomit
- Haematemesis (with the exception of swallowed blood eg. From nose bleed or ingested from cracked nipple)
- Onset of regurgitation or vomiting after 6 months of age or persisting after 1 year old
- Blood in stool
- Abdominal distension, tenderness or palpable mass
- Chronic diarrhoea
- Child appears unwell +/- fever
- Dysuria
- Bulging fontanelle
- Rapidly increasing head circumference
- Persistent morning headache/vomiting worse in morning
- Altered responsiveness, lethargy or irritability
- Infants with, or at high risk of atopy

**Is the child stable?**

YES

NO

YES

**Transfer to Resus**

- Stabilise per APLS
- Get senior ED /surgical/paeds help immediately
- IV access
- Bloods - FBC, CRP, LFT, U&E, amylase
- BM/ketones
- IV fluids

**Consider other diagnosis - follow actions overleaf**

NO

**Are there any risk factors for GORD ?**

- Premature birth
- neuro-disability

**Does the child have 1 or more of the following symptoms:**

- Unexplained feeding difficulties (e.g. refusing to feed, gagging or choking)
- Distressed behaviour
- Faltering growth
- Chronic cough/ Hoarseness
- Apnoea / ALTE
- A single episode of pneumonia
- Vomiting/regurgitation
- Back arching +/- episodic torticollis (neck extension & rotation)
- Recurrent, appropriately managed otitis media

NO

**1 symptom only:**

Do not routinely investigate or treat GOR, reassure family and take step-wise approach:

If breast-fed – get b/f assessment before other treatment

If formula fed:

- review feeding hx then:
- reduce volume only if excessive for weight, then:
- offer smaller more frequent feeds (maintain normal volume) then:
- offer a trial of thickened formula

Diet/lifestyle advice if older child and obese.

Patient Information leaflet and discharge to primary care

YES

**Vomiting / overt regurgitation + at least 1 other symptom:**

- Trial of alginate therapy, if successful try stopping at intervals to see if child has recovered, if no improvement:
- GP referral to consider 4 week trial of PPI or H<sub>2</sub> receptor agonist, consider referral to paediatric specialist if symptoms persist

## **RED FLAG SYMPTOMS SUGGESTING DISORDERS OTHER THAN GOR**

**Safeguarding children** : remember that child maltreatment:

- Is common
- Can present anywhere
- May co-exist with other health problems including GORD

<b>Symptoms &amp; signs</b>	<b>Possible diagnostic implications</b>	<b>Suggested actions</b>
<b>Gastrointestinal symptoms</b>		
Frequent forceful (projectile) vomiting	May suggest hypertrophic pyloric stenosis in infants up to 2 months old	Cap gas Paediatric surgery referral
Bile-stained (green or yellow-green) vomit	May suggest intestinal obstruction	NBM Paediatric surgery referral
Haematemesis (blood in vomit) with exception of swallowed blood (as overleaf)	May suggest an important and potentially serious bleed from the oesophagus, stomach or upper gut	Refer to Paeds
Onset of regurgitation and/or vomiting after 6 months old or persisting after 1 year of age	Late onset suggests a cause other than reflux, e.g. UTI (see NICE urinary tract infection in children) Persistence suggests an alternative diagnosis	Urine microbiology/ investigation Refer to Paeds
Blood in stool	May suggest a variety of conditions including bacterial gastroenteritis, infant cows' milk protein allergy (see NICE food allergy in children & YP) or acute surgical condition	Stool for microbiology/ investigation Refer to Paeds
Abdominal distension, tenderness of palpable mass	May suggest intestinal obstruction or another acute surgical condition	Paediatric surgery referral
Chronic diarrhoea	May suggest cows' milk protein allergy (see NICE food allergy in children & YP)	Refer to Paeds
<b>Systemic symptoms</b>		
Appearing unwell fever	May suggest infection (see NICE feverish illness in children)	Clinical assessment & urine microbiology/ investigation Refer to Paeds
dysuria	May suggest UTI (see NICE urinary tract infection in children)	Clinical assessment & urine microbiology/ investigation Refer to Paeds
Bulging fontanelle	May suggest raised intracranial pressure, e.g. due to meningitis (see NICE guideline on bacterial meningitis * meningococcal septicaemia)	Refer to paed Sepsis screen
Rapidly increasing head circumference (more than 1cm per week) Persistent morning headache or vomiting worse in morning	May suggest raised intracranial pressure, e.g. due to hydrocephalus or brain tumour	Refer to Paeds
Altered responsiveness, e.g. lethargy or irritability	May suggest an illness such as meningitis (see NICE guideline on bacterial meningitis * meningococcal septicaemia)	Refer to Paeds
Infants and children with, or at high risk of, atopy	May suggest cows' milk protein allergy (see NICE food allergy in children & YP)	Refer to Paeds