NHS
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Clinical Commissioning Group

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Referral Support Service

Paediatrics

PA15 Recurrent Abdominal Pain

Paediatric Normal Values (adapted from APLS)			
Age	Resp Rate	Heart Rate	Systolic BP
Neonate <4w	40-60	120-160	>60
Infant <1 y	30-40	110-160	70-90
Toddler 1-2 yrs	25-35	100-150	75-95
2-5 yrs	25-30	95-140	85-100

Definition

At least three episodes of pain that occur over at least three months in children aged over 3 years which is severe enough to affect the child's ability to perform normal activities

Exclude Red Flag Symptoms

- Involuntary weight loss
- Faltering growth
- Persistent RUQ or RLQ pain
- GI bleeding
- Family history of IBD
- Urinary symptoms
- Chronic/severe vomiting or diarrhoea
- Back/flank pain
- Jaundice
- Abnormal examination; mass, hepatosplenomegaly, jaundice, perianal abnormalities, spinal tenderness
- Consider safeguarding

General Points

- Affects 10-20% of children in the UK
- Often considered functional (non-organic) abdominal pain, however, an organic cause is found in 5-10% of cases
- At the time of presentation, the parent and child may be frustrated or increasingly concerned that there is a serious underlying disorder

Presenting Features

- Pain is often ill-defined, poorly localised or peri-umbilical
- Episodes of pain usually last for <1h, and resolve spontaneously
- May be triggered or exacerbated during times of stress (e.g. school transitions, parental divorce, emotional trauma)
- The child is well and functions normally between episodes but may have symptoms of anxiety or depression (separation anxiety, social phobias, specific phobias, generalised anxiety)

- There may be a family history of IBS, reflux or constipation

Rome IV Criteria
This can help to differentiate between the different types of functional abdominal pain

Diagnosis	Criteria
Functional abdominal pain syndrome	• Episodic or continuous abdominal pain occurring ≥ 4x/m • Insufficient criteria for IBS, functional dyspepsia or abdominal migraine • Cannot be fully explained by another medical condition after appropriate evaluation • Does not solely occur with physiological events, e.g. menses • Can coexist with other medical conditions such as inflammatory bowel disease
Functional dyspepsia	• Persistent/recurrent epigastric pain • No relief on opening bowels • No change in stool frequency or form

Irritable bowel syndrome	• Abdominal pain persists for 1d/wk in the last 3m with symptoms present for at least 6m prior to diagnosis
	• Associated with 2 or more of the following at least 25% of the time:
	  ○ Pain related to defecation
	  ○ Associated change in stool frequency or form

Abdominal migraine	• Paroxysmal episodes of intense, acute, peri-umbilical pain lasting more than 1h
	  ○ Intervening periods of usual health lasting weeks to months
	  ○ Pain interferes with normal activity
	  ○ Associations (2+): anorexia, nausea, vomiting, photophobia, pallor
	Must occur more than 2x in preceding 12m

Differential Diagnoses

- Gynaecological, e.g. pelvic inflammatory disease, ovarian pathology
- Coeliac disease
- Chronic constipation; full bowel history including frequency, consistency, size, excessive straining
- Small bowel bacterial overgrowth; symptoms commonly include bloating, flatulence, belching, halitosis, intermittent diarrhoea
- Food protein intolerance (milk, egg, wheat, soya)
- Sugar intolerance (frustose, lactose, sucrose)

Investigations

Explain that while baseline tests are being performed and they are expected to be normal. In the absence of red flag symptoms complete coeliac screen only

- Coeliac screen including IgA serology in ALL children if not done in the last year
- Consider FBC, CRP, U&Es, LFTs,
- TFTs if chronic severe constipation
- Stool for culture to include ova, parasites, giardia if diarrhoea present
- Urine dipstick
- Pregnancy test (teenage girls)
- Abdominal USS: if RUQ or RLQ pain, jaundice, urinary symptoms, back/flank pain, weight loss, failure to thrive or abnormal abdominal exam *Bowel wall thickening may indicate IBD, if normal can be a useful for reassurance.*
- Faecal calprotectin should NOT be requested in primary care. Normal values are much higher in children and this can heighten anxiety in already anxious families.

Management

- A thorough history and examination is essential.
- Establishing empathy and rapport with parents and child is paramount.
- The idea of functional abdominal pain should be introduced early.
- Primary treatment is reassurance, explanation and education
- Ask parents what they are worried is causing the pain, so concerns can be addressed
- Focus on management is improvement of function rather than complete resolution of pain
- Although pain is real, it does not necessarily mean it is caused by an abnormality in the workings of the bowel
- Focus on return to function; liaising with school might be important
- Offer a follow-up and safety net
- Symptom/stool diaries can be helpful

Biopsychosocial Approach

- Biological: physiotherapy, pain management
- Psychological: coping mechanisms, family therapy.
- Social: have 'social' aim, e.g. going back to school on a phased return after prolonged absence

Information to include in explanation

- *This type of pain is really common in people of your age*
- *While we may not be able to stop you feeling the pain, there are lots of ways we can help you continue doing the things you enjoy*
- *The body has different ways of coping with pain*
- *Sometimes after a mild illness, the way your body processes pain changes*
- *Nerve signals from the gut or brain can cause the gut to be more sensitive to triggers that*

do not normally cause pain, such as stretching or bloating

- *A lot of the sensations that are usually filtered out are felt more deeply and the body recognises this as pain, and send out more signals to try to address the pain which can in turn worsen pain. This is called the up-regulation of the pain pathway*
- *Sometimes these feelings can be brought on by stressful situations in the same way people get headaches when they are worried, feel sick when they are given bad news, need to urinate when nervous or have loose stools when anxious*.
- *It is important to work 'around' the pain rather than focus too much on it to the extent that it interferes with day to day activities.*

Referral Information

Indications for referral to paediatrics

- If coeliac disease suspected. Gluten should NOT be excluded from died until review with paediatrician
- An organic cause for pain is considered or discovered
- Repeated attendances with abdominal pain (2 max 3). *It is important for families to be told they are being referred to see a child specialists who deals with this all the time.*

Information to include in referral letter

- Duration and nature of abdominal pain
- Investigations undertaken and treatments tried including outcomes
- Details of any emotional stressors present in the past 12 months
- Details of any impact on education/childcare (i.e. missed school/nursery days)

Patient information leaflets/ PDAs

Patient.info/childrens-health/recurrent-abdominal-pain-in-children-leaflet

References

- Reust CE et al. Recurrent Abdominal Pain in Children. Am Fam Physician. 2018 Jun 1597(12):785-793
- Schmolson MJ et al. What Is New in Rome IV. J Neurogastroenterol Motil. 2017 Apr 3023(2):151-163. Doi: 10.5056/jnm16214
- Tidy C. Recurrent Abdominal Pain in Children Patient.info 2021 [Viewed 19 Aug 2021]