

# Ten-minute consult: Recurrent abdominal pain in children

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**Recurrent abdominal pain (RAP) is defined as at least three bouts of pain occurring over a period of at least three months, severe enough to affect daily activities. It has been reported to be prevalent in up to 25% of all children of school age with no organic cause found in the majority.**

Constipation is the most frequent cause of RAP in children, with up to 60% of children reported to be affected by it at some point through their childhood.

Inflammatory bowel disease (IBD) is the most important one to exclude, and clinical features with a faecal calprotectin screen (perform only in children over age four, as the normal reference range in younger children is unknown) remains effective in this situation.

Coeliac disease remains common and has increased in recent decades. Request total IgA level with a coeliac screen. Gluten should not be excluded in diet until formal diagnosis of coeliac disease is made by a gastroenterologist.

A small proportion of children may have seronegative coeliac disease, especially in association with other autoimmune conditions, and index of suspicion should be high in these children with corroborating symptoms, despite a negative serology.

Non-coeliac gluten sensitivity (NCGS) also can be a part of this spectrum and needs to be considered as does *Helicobacter pylori*, especially if associated with mainly upper GI symptoms and halitosis. Breath testing for *H. pylori* can be unreliable especially in younger children as the protocol is difficult to follow. Request a stool antigen, which has equal sensitivity.

Eosinophilic esophagitis (causing RAP) in children is on the rise, with symptoms of difficulty swallowing and the sensation of food getting stuck behind chest. It can also present at an early age with fussy eating, often in the setting of atopy. Refer for a gastroscopy



## Key messages

- Assess for constipation with a detailed history, especially for faecal impaction. If in doubt, an empirical treatment trial with an osmotic laxative for a few weeks is a reasonable first step
- A food diary (apps such as Bowelle or mySymptoms) is a useful exercise to try and identify specific food triggers, especially with intermittent symptoms
- For older children with reflux/regurgitation, a four-week trial of a proton pump inhibitor (PPI) can be considered prior to referral.

if suspected. Food intolerances, including transient lactose intolerance is common and a trial of excluding suspected food triggers (except gluten) is reasonable.

Finally, the spectrum of Disorders of the Gut Brain Interaction or DGBI (formally called functional abdominal pains), including functional dyspepsia, irritable bowel syndrome, abdominal migraine and functional abdominal pain (not otherwise specified) must be considered as a formal diagnosis and supportive interventions often lead to an excellent outcome in these children. For adolescents, the HEADSSS screen may be a useful tool to gather corroborative information.

## Who to investigate?

Children with red flags warrant further investigations. However, it is recognised that red flags and laboratory workup do not reliably distinguish organic from non-organic causes in children with RAP. The decision to investigate should be considered on an individual basis.

Deciding to investigate includes but is not limited to unintentional weight loss, blood in stools or nocturnal stooling, unexplained fevers, abdominal mass/hepatosplenomegaly, persistent vomiting or diarrhoea, dysphagia, extraintestinal symptoms, chronicity of symptoms (typically, if >6 months) and amount of missed school

Once we decide to investigate, the following are the high yield investigations to perform in RAP in children:

**Bloods:** FBC, UEC, LFTs, TFT, CRP and ESR, iron studies, Total IgA and coeliac screen

**Stool:** Faecal calprotectin, *H. pylori* stool antigen and faecal MCS + multiplex PCR

**Urine analysis**

**Endoscopy:** refer as appropriate

Genetic screening for coeliac disease has no diagnostic role but can help rule out with high certainty, if negative. Blood allergy testing is unreliable and not recommended.

Blastocystis and Dientamoeba have no known pathogenic role with 50% of children aged between 5 and 10 testing positive on stool testing. Research does not support routine metronidazole for children with chronic gastrointestinal symptoms with these organisms.

Abdominal ultrasound is rarely helpful (unless abdominal mass felt etc) and should not be routinely requested.

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## Treatment options:

Treatment is tailored as per cause identified. In the absence of any obvious cause, an empirical treatment for constipation is a reasonable and safe approach,

considering the possibility of occult constipation. For the DGBIs., dietary, pharmacological or psychosocial intervention can all be considered, but the overall evidence base for treatment decisions is poor.

In more recent studies, probiotics, CBT and hypnotherapy have shown

promise, but evidence regarding relative effectiveness of different strains of probiotics is currently insufficient to guide clinical practice. A multidisciplinary approach in these patients is imperative. [mf](#)

*References available on request*  
*Author competing interests*