BC Children's Hospital™

ABDOMINAL PAIN

A RESOURCE GUIDE

Abdominal Pain

Abdominal Pain is common

- Abdominal pain in children is common, and most often is not a sign of something dangerous.

Functional Abdominal Pain is the most common cause of Chronic Abdominal Pain

- It is also referred to as a Disorder of Gut Brain Interaction (DGBI)
- Subtypes include
  - Functional Dyspepsia
  - Postprandial Distress Syndrome
  - Epigastric Pain Syndrome
  - Irritable Bowel Syndrome
  - Abdominal Migraine
  - Functional Abdominal Pain

Diagnostic Criteria Functional Abdominal Pain (NOS)

- $\geq$2 months, at least 4 x / month
- Episodic or continuous abdominal pain that does not occur solely during physiologic events (e.g., eating, menses)
- Insufficient criteria for irritable bowel syndrome, functional dyspepsia, or abdominal migraine
- After appropriate evaluation, the abdominal pain cannot be fully explained by another medical condition

Red Flags

- Red Flags are not specific but symptoms of concern include:
  - Involuntary weight loss, slowed linear growth or delayed puberty,
  - Difficulty swallowing/dysphagia, significant vomiting (bilious, protracted),
  - Pain away from the umbilicus, nocturnal waking,
  - Blood in stool or GI blood loss, severe diarrhea (including nocturnal),
  - Unexplained fever, joint pain or swelling,
  - Family history of Crohn's disease or colitis,
- On Exam
  - Hepatosplenomagly
  - Perianal abnormalities
- Laboratory:
  - Anemia, increased CRP, increased tissue tranglutaminase, or elevated fecal calprotectin.

Foundations of Treatment of FAP

- Treatment is supportive in nature.
- Validating that the pain is real is important.
- Major goals include return to function and symptom reduction

What questions in history can be explored?

- In addition to details of the abdominal pain (location, nature, severity, alleviating factor) and asking about other symptoms (GI and non GI) including red flags, it is important to understand how this has affected the child, the household, and psychosocial influencers.
- Suggested questions / template, "Approach to pediatric abdominal pain" - UBC

What investigation should be done?

- There is no fixed work up for functional abdominal pain as the diagnosis is a clinical one. Having said that, it is reasonable to do some baseline blood work including, CBC, Albumin, ALT, GGT, Bili and Tissue Transglutaminase.
- Other testing can be driven by red flags - example if diarrhea, consider stool infective studies and a fecal calprotectin.

What therapies can support the patient / family?

- Validate the symptoms but don't dwell on the symptoms.
- The symptoms are "real", not "all in your head", but you don't need to let them control you
- A common approach is to work on the 3 P's - Physical / Psychological / Pharmacological

- A plan for **Physical activity** is very important and can improve function
  - Aim for 30 min, 3-4 times per week - even a short walk counts!
  - Yoga has been shown to improve IBS – YouTube has many videos to do at home for all age groups and starting with 10 mins sessions can be helpful, the video does not have to be IBS specific so pick one that looks fun and give it a try!

- **Psychological therapies** are evidence based and come in different forms
  - Breathing / Biofeedback / Relaxation / Hypnotherapy / Cognitive Behavior Therapy - (can try apps like Headspace and Calm)
  - Sleep hygiene and routine are very important - wind down 1 hour before bed, go to bed and wake up at same time everyday
  - Identify and treat anxiety / depression if present
  - A plan for return to school is important.
  - Many of the above are best done with a counselor / therapist

- **Pharmacological Therapy**
  - Limited evidence, particularly in children but a reasonable trial (time defined) can be explored.
  - OverTheCounter products could include: Peppermint Oil Capsules, Iberogast(R), Probiotics
  - Antispasmodic medications such as Buscopan(R) can be tried
  - Prescription medications such as cyproheptadine, TCA (such as amitiptyline), or SSRI/SNRI have some evidence base but keep in mind the large placebo effect in most studies.

- **Dietary**: There is no specific 'diet' however:
  - If there is identified triggers one can consider removal.
  - Unless there are immediate symptoms (with multiple systems) allergy testing is not warranted
  - One can pay attention to FODMAP foods, which generally produce more gas and try to reduce the amounts to see if it helps.
    - 'Clean' eating helps - less eating out, less processed foods, drink mostly water, avoid carbonated and caffeinated drinks
  - Some benefit from more fibre in their diet
  - If you are doing 'elimination' diets, make sure to control 1 food at a time, evaluate if it works and REINTRODUCE the food if no difference is noted.

Resources

UpToDate - Chronic Abdominal Pain
•Patient education: Chronic abdominal pain in children and adolescents (Beyond the Basics)

ACG - American College of Gastroenterology
•Functional Abdominal Pain in Children Overview

Health Link BC
•Abdominal Pain, Age 11 and Younger

GI KIds
•What is functional Abdominal Pain

Health Practitioner Resources

Chronic Abdominal Pain
•Berger MY, Gieteling MJ, Benninga MA. Chronic abdominal pain in children. BMJ. 2007 May 12;334(7601):997-1002. PMID: 17494020;

An Update on the Assessment and Management of Pediatric Abdominal Pain
•Friesen C, Colombo JM, Deacy A, Schurman JV. An Update on the Assessment and Management of Pediatric Abdominal Pain. Pediatric Health Med Ther. 2021. PMID: 34393542

Functional Abdominal Pain in Children Stat Pearls (2023)
•McClellan N, Ahlawat R. Functional Abdominal Pain in Children. [Updated 2023 Jun 26]. In: StatPearls