Abdominal Pain Related – Functional Gastrointestinal Disorders
Paediatric Guideline, SPH

Previous Classification Systems for Abdominal Pain in Children:

**Recurrent abdominal pain, Apley and Naish, 1958**
Abdominal pain that waxes and wanes, occurs for at least 3 episodes within 3 months, and is severe enough to affect a child’s activities

**Chronic abdominal pain, Subcommittee on chronic abdominal pain, 2005**
Longstanding intermittent or constant abdominal pain. Functional in most children (that is, without objective evidence of an underlying organic disorder).

Current Classification Systems for Abdominal Pain in Children:
**Rome III criteria, 2006**

**Functional dyspepsia** *
Must include all of the following (for at least once a week over at least 2 months before diagnosis):
- Persistent or recurrent pain or discomfort centred in the upper abdomen (above the umbilicus).
- Not relieved by defecation or associated with the onset of a change in stool frequency or stool form.

**Irritable bowel syndrome** *
Must include all of the following (for at least once a week over at least 2 months before diagnosis):
- Abdominal discomfort (uncomfortable sensation not described as pain) or pain associated with two or more of the following at least 25% of the time.
  - Improved with defecation.
  - Onset associated with a change in frequency of stool.
  - Onset associated with a change in form (appearance) of stool

**Functional abdominal pain** *
Must include all of the following for at least once a week over at least 2 months before diagnosis:
- Episodic or continuous abdominal pain.
- Insufficient criteria for other functional gastrointestinal disorders.

**Functional abdominal pain syndrome** *
Must include functional abdominal pain at least 25% of the time and ≥1 of the following:
- Some loss of daily functioning
- Additional somatic symptoms such as headache, limb pain, or difficulty in sleeping

**Abdominal migraine** *
Must include all of the following for ≥2 times in the preceding 12 months:
- Paroxysmal episodes of intense, acute peri-umbilical pain that lasts for ≥1 hours
- Intervening periods of usual health lasting weeks to months
- The pain interferes with normal activities
- The pain is associated with two or more of the following:
  - Anorexia
  - Nausea
  - Vomiting
  - Headache
  - Photophobia
  - Pallor
*No evidence of an inflammatory, anatomical, metabolic, or neoplastic process that explains symptoms.

Initial clinical assessment:
1. Full history – exclude red flags
2. Height and weight

Red flags:
1. Persistent symptoms in the right upper and lower quadrants
2. Waking up at night because of pain
3. Dysphagia, heartburn
4. Unintended loss of > 10% body weight
5. Impaired growth
6. Delayed puberty
7. Recurrent vomiting (bilious, cyclical, protracted or worrisome to the physician)
8. Chronic diarrhoea, particularly at night
9. Evidence of GI blood loss (visible or positive FOB)
10. Unexplained fever
11. Family history of chronic IBD, celiac disease, peptic ulcer disease or other abdominal conditions
12. Abnormal physical findings eg. Palpable mass, hepatomegaly, splenomegaly, guarding
13. Arthritis
14. Disturbances of micturition
15. Disturbances of the female reproductive system (dysmenorrhoea, amenorrhoea)

Investigations:
- FBC, LFTs, CRP, ESR
- Coeliac serology
- Urine dipstick
- Stool Sample for Faecal Occult Blood

If these basic tests are normal no need for further investigations.

* No need for H.pylori investigation unless peptic ulcer disease suspected

Management options:
1. Reassurance: explain that there is no organic cause, but acknowledge that the pain is a real problem
2. Education: discuss pathophysiological mechanisms of chronic abdominal pain. The explanatory model of visceral hypersensitivity with a low individual pain threshold helps understanding as to why they (unlike other people) have pain when the bowel wall is physiologically stretched.
3. Psychological support: acceptance by parents of the role of psychological factors in the maintenance of symptoms is strongly associated with recovery
4. CBT:

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<td>Psycho-education</td>
<td>Education about causes</td>
<td>Promoting patient cooperation and supporting self responsibility</td>
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<td>Teaching coping strategies</td>
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<td>Relaxation</td>
<td>Progressive muscle relaxation</td>
<td>Reduction of pain due to tension and creation of a relaxed state</td>
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<td>Autogenic training</td>
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<td>Cognitive techniques</td>
<td>Distraction techniques</td>
<td>Learn to deal with the pain with a positive attitude</td>
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<td>Cognitive restructuring</td>
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<td>Behaviour-orientated</td>
<td>Make activity plans</td>
<td>Restoration of functional ability in everyday life</td>
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<td>techniques</td>
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- The aim is not to relieve symptoms but acquire strategies for coping with the pain and continuing with normal activities.
- The pain is a trigger for coping strategies and not as an uncontrollable event.
- Reduction of avoidance behaviour (school absence, avoiding activity)

5. **Peppermint oil** in IBS (for 2/52)
6. **Pizotifen** in abdominal migraine

**Management options unlikely to be beneficial:**
1. Famotidine (H2 receptor agonist)
2. Dietary changes – added dietary fibre, lactose-free diet
3. Alternative/complimentary medicine

**Management options of unknown efficacy:**
1. Probiotics
2. Hypnosis

**References:**