Ashford and St. Peter's Hospitals
NHS Foundation Trust

Chronic Abdominal Pain Guideline

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June 2013	New Guideline		
March 2018			
December 2019		Whole document review	Paediatric Guideline Group
March 2026		Whole document review. Additional information re DGBI	Paediatric Guideline Committee.

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Contents

Page

1. Guideline
    a. Introduction
    b. Contents
2. Supporting References
3. Guideline Governance
    a. Scope
    b. Purpose
    c. Duties and Responsibilities
    d. Approval and Ratification
    e. Dissemination and Implementation
    f. Review and Revision Arrangements
    g. Equality Impact Assessment
    h. Document Checklist
4. Appendices

1. Guideline

a. Introduction

Chronic abdominal pain (CAP) in children represents one of the most common health issues affecting young children and adolescents.

It is often defined as involving ***3 episodes of abdominal pain over a period of 3 or more months***.

Causes can be classified as being either organic or functional:

- **Organic:** There is an underlying medical cause either gastrointestinal or non-gastrointestinal
- **Functional:** The child exhibits physical symptoms, however, it cannot be explained by any obvious biochemical, infectious or structural abnormalities (this represents the majority of cases of chronic abdominal pain)
- Functional abdominal pain disorders present significant challenges:
- For clinicians
    - These cases may be time consuming and frustrating as although symptoms may suggest a benign issue, with initial testing showing nil concerns a combination of persisting symptoms, pressure from parents and increasing diagnostic uncertainty can predispose them to perform more extensive and often unnecessary testing.
- For parents
    - There may be a significant degree of anxiety due to an inability of the clinician to provide a clear explanation and solution for their child's presentation.
- For children
    - Symptoms remain unresolved resulting in persisting distress. It can often lead to significant impacts to their quality of life as reflected in higher incidences of depression and anxiety and increased consumption of healthcare services.

b. Contents

Previous Classification Systems for Chronic Abdominal Pain in Children

Appley and Naish, 1958 - *Recurrent abdominal pain*

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

Subcommittee on chronic abdominal pain, 2005 - *Chronic abdominal pain*

Longstanding intermittent or constant abdominal pain. Functional in most children - that is, without objective evidence of an underlying organic disorder

Current Classification Systems for Chronic Abdominal Pain in Children

Rome IV criteria, 2016 - *Functional abdominal pain disorders. There are* 4 categories:

Functional dyspepsia	Diagnostic criteria - Must include one or more of the following bothersome symptoms at least 4 times a month for at least 2 months prior to diagnosis: 1. Postprandial fullness 2. Early satiation 3. Epigastric pain or burning not associated with defecation 4. After appropriate evaluation, the symptoms cannot be fully explained by another medical condition
	Within Functional dyspepsia the following subtypes are now adopted: **Postprandial distress syndrome** 1. Bothersome postprandial fullness/ early satiation which prevents finishing a regular meal. 2. Upper abdominal bloating, postprandial nausea, or excessive belching. **Epigastric pain syndrome** 1. Bothersome (severe enough to interfere with normal activities) pain or burning localized to the epigastrium. The pain is not generalized or localized to other abdominal or chest regions and is not relieved by defecation or passage of flatus. 2. Burning quality of the pain but without a retrosternal component 3. Commonly induced or relieved by ingestion of a meal but may occur while fasting.

Irritable bowel syndrome	Diagnostic criteria - Must include all of the following for at least 2 months prior to diagnosis: 1. Abdominal pain at least 4 days per month over at least 2 months associated with one or more of the following: 2. Related to defecation 3. A change in frequency of stool 4. A change in form (appearance) of stool 5. In children with abdominal pain and constipation, the pain does not resolve with resolution of the constipation (children in whom the pain resolves have functional constipation, not IBS) 6. After appropriate evaluation, the symptoms cannot be fully explained by another medical condition
Abdominal migraine	Diagnostic criteria - Must include all the following occurring at least twice for at least 6 months prior to diagnosis: 1. Paroxysmal episodes of intense, acute periumbilical, midline or diffuse abdominal pain lasting 1 hour or more (should be the most severe and distressing symptom) 2. Episodes are separated by weeks to months 3. The pain is incapacitating and interferes with normal activities 4. Stereotypical pattern and symptoms in the individual patient 5. The pain is associated with two or more of the following: 1. Anorexia 2. Nausea 3. Vomiting 4. Headache 5. Photophobia 6. Pallor 6. After appropriate evaluation, the symptoms cannot be fully explained by another medical condition

Functional abdominal pain - not otherwise specified	Diagnostic criteria - Must be fulfilled at least 4 times per month for at least 2 months and include all of the following: 1. Episodic or continuous abdominal pain that does not occur solely during physiologic events (e.g., eating, menses) 2. Insufficient criteria for irritable bowel syndrome, functional dyspepsia, or abdominal migraine 3. After appropriate evaluation, the abdominal pain cannot be fully explained by another medical condition

Upcoming Classification for Abdominal Pain in Children

Rome V criteria: Disorder of Gut-Brain Interaction (DGBI), to be completed in 2026

DGBI was previously known as functional gastrointestinal disorders (FGID). The terminology was changed for 2 reasons:

- The word “functional” being both nonspecific and potentially stigmatizing for being viewed as “nonorganic” or even psychiatric.
- The understanding of these disorders has evolved over the years from absence of traditional organic disease to disorders of gastrointestinal function and dysregulation of the gut-brain axis

The core tenant of DGBI relates to visceral hypersensitivity:

- This involves abnormal pain signalling to chemical stimuli and/or mechanical distention. Visceral pain is detected by pain sensing neurons which pick up harmful thermal, mechanical or chemical stimuli. In individuals with visceral hypersensitivity, they experience painful responses to a normally innocuous stimulus and/or experience an exaggerated response to a painful stimulus.
- The reasoning behind this is believed to be due to an upregulation of excitatory receptors or decreased levels of inhibitory channels within the peripheral nerve terminals of the gut.
- Further research is also being carried out to assess the involvement of the immune system and it’s role in DGBI.

Initial Clinical Assessment

1. **History** - exclude red flags
   - Pain characteristics (nature, location, duration)
   - Associated symptoms
     - Changes in bowel habits
     - Appetite changes
     - Urinary changes
   - History of reflux symptoms
   - Dietary history
   - Family history (IBD, celiac or renal disease)
   - Menstrual and sexual history
   - HEADSSS Assessment
   - Impact on daily functioning (pain diary may be useful)
2. **Examination**
   - Height and Weight plot
   - Abdominal examination
   - Examination of external genitalia
   - Respiratory examination (some children with respiratory pathology can present with abdominal pain)
   - Signs of dehydration

Red flags:

1. Unintentional weight loss/ stunted growth
2. Unexplained fever
3. Chronic severe diarrhoea (particularly at night) or vomiting (especially bilious)
4. Gastrointestinal bleeding
5. Persistent right upper quadrant or right lower quadrant pain
6. Dysphagia, odynophagia
7. Waking up at night due to pain
8. Family history of chronic IBD, celiac disease, peptic ulcer disease or other abdominal conditions
9. Urinary symptoms, back or flank pain
10. Abnormal physical findings eg. Palpable mass, hepatomegaly, splenomegaly, guarding

Investigations

**If no red flags there is little evidence for performing further investigations*

Investigations depend upon the likely diagnosis and can involve:

- **Blood:** FBC, LFTs, CRP, ESR, Coeliac screen (only helpful if gluten in their diet)
- **Urinalysis** (including pregnancy test and STI screen if required)
- **Stool sample**
- **Faecal calprotectin** for children above 4 if features of IBD
- Imaging:
    - **Abdominal ultrasound** - low yield for identifying pathology if no red flags

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

Management

1. **Early management of expectations**

    - Introduce this early and inform that investigations are likely to be normal

2. **Reassurance:** Explain that there is no organic cause even though the pain is real but that it will likely resolve in time

3. **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 have pain when the bowel wall is physiologically stretched.

3. **Psychological support**

    - Available through St George's Hospital Gastroenterology Team

4. **CBT:**

    - Refer to CAMHS

CBT Element	Examples	Goal
Psycho-education	Education about causes Teaching coping strategies	Promoting patient co-operation and supporting self responsibility
Relaxation	Progressive muscle relaxation Autogenic training	Reduction of pain due to tension and creation of a relaxed state
Cognitive techniques	Distraction techniques Cognitive restructuring	Learn to deal with the pain with a positive attitude
Behaviour-orientated techniques	Make activity plans	Restoration of functional ability in everyday life

5. **Peppermint oil** in IBS

    - 1-2 capsules TDS for up to 3 months (For ages 15-17)

6. **Pizotifen** in abdominal migraine

    - 500mcg ON, increase dose to 1.5mg in divided doses if necessary (For ages 5-17)

7. **Dietary intervention** - increasing fibre intake is noted to have a marginal effect

8. **Famotidine** in functional dyspepsia
    - Refer to St George's Hospital Gastroenterology Team regarding dosage
9. **Online Resources** (NHS approved)
    - **Apps**
        i. Mindfullness and Sleep **-** **https://www.smilingmind.com.au/**
        ii. Meditation and Sleep **-** **https://www.calm.com/**
        iii. Meditation **-** **https://www.headspace.com/meditation/kids**
    - **Pain resources**
        i. Pain Concern **-** **https://painconcern.org.uk/**
        ii. The Pain Toolkit **-** **https://www.paintoolkit.org/resources/useful-links**
10. **Diaphragmatic Breathing Exercises** (found in Appendices)

Management options of **unknown** efficacy:

1. **Probiotics** (evidence suggests minimal effect)
2. **Hypnosis** (difficult to quantify benefits)
    - Available privately

2. Supporting References

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4. Aucoin, M., Lalonde-Parsi, M.-J. and Cooley, K. (2014) 'Mindfulness-based therapies in the treatment of functional gastrointestinal disorders: A meta-analysis', *Evidence-Based Complementary and Alternative Medicine*, 2014(1).
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9. Rome IV criteria (2025) Rome Foundation. Available at: https://theromefoundation.org/rome-iv/rome-iv-criteria/ (Accessed: 20 December 2025).
10. Vanuytsel T, Bercik P, Boeckxstaens GUnderstanding neuroimmune interactions in disorders of gut–brain interaction: from functional to immune-mediated disordersGut 2023;72:787-798.

3. Guideline Governance

a. Scope

This guideline is relevant to all staff caring for all children from 0-18 years old across the emergency department, inpatient ward and outpatient department.

b. Purpose

i. This guidelines aims to facilitate a common approach to the management of children. At times deviation from the guideline may be necessary, this should be documented and is the responsibility of the attending consultant.

ii. This guideline is subject to regular review to ensure ongoing evidence based practice.

c. Duties and Responsibilities

All healthcare professionals responsible for the care of all children 0-18years should be aware of practice according to this guideline.

d. Approval and Ratification

This guideline will be approved and ratified by the Paediatric Guidelines Group.

e. Dissemination and Implementation

i. This guideline will be uploaded to the trust intranet 'Paediatric Guidelines' page and thus available for common use.
ii. This guideline will be shared as part of ongoing education within the Paediatric Department for both medical and nursing staff.
iii. All members of staff are invited to attend and give comments on the guideline as part of the ratification process.

f. Review and Revision Arrangements

a. This policy will be reviewed on a 3 yearly basis by the appropriate persons.
b. If new information comes to light prior to the review date, an earlier review will be prompted.
c. Amendments to the document shall be clearly marked on the document control sheet and the updated version uploaded to the intranet. Minor amendments will be ratified through the Paediatric Guidelines Group. A minor amendment would consist of no major change in process, and includes but is not limited to, amendments to documents within the appendices.

g. Equality Impact Assessment

Background • Who was involved in the Equality Impact Assessment
Dr Usmani SHO, Dr Thakur Consultant
Methodology • A brief account of how the likely effects of the policy was assessed (to include race and ethnic origin, disability, gender, culture, religion or belief, sexual orientation, age) • The data sources and any other information used • The consultation that was carried out (who, why and how?)
All groups of staff and patients were taken into consideration and there is no bias towards or against any particular group.
Key Findings • Describe the results of the assessment • Identify if there is adverse or a potentially adverse impacts for any equalities groups
There is no evidence of discrimination.
Conclusion • Provide a summary of the overall conclusions
There is no evidence of discrimination.
Recommendations • State recommended changes to the proposed policy as a result of the impact assessment • Where it has not been possible to amend the policy, provide the detail of any actions that have been identified • Describe the plans for reviewing the assessment
This guideline is appropriate for use.

h. Document Checklist

To be completed (electronically) and attached to any document which guides practice when submitted to the appropriate committee for approval or ratification.

Title of the document: Chronic Abdominal Pain Guideline

Policy (document) Author: Dr Usmani SHO, Dr Thakur Consultant

Executive Director: N/A

		Yes/No/ Unsure/NA	Comments
1.	**Title**		
	Is the title clear and unambiguous?	**Yes**	
	Is it clear whether the document is a guideline, policy, protocol or standard?	**Yes**	
2.	**Scope/Purpose**		
	Is the target population clear and unambiguous?	**Yes**	
	Is the purpose of the document clear?	**Yes**	
	Are the intended outcomes described?	**Yes**	
	Are the statements clear and unambiguous?	**Yes**	
3.	**Development Process**		
	Is there evidence of engagement with stakeholders and users?	**Yes**	
	Who was engaged in a review of the document (list committees/ individuals)?	**Yes**	**Paediatric Guideline Group**
	Has the policy template been followed (i.e. is the format correct)?	**Yes**	
4.	**Evidence Base**		
	Is the type of evidence to support the document identified explicitly?	**Yes**	

		Yes/No/ Unsure/NA	Comments
	Are local/organisational supporting documents referenced?	**Yes**	
5.	**Approval**		
	Does the document identify which committee/group will approve/ratify it?	**Yes**	
	If appropriate, have the joint human resources/staff side committee (or equivalent) approved the document?	**No**	
6.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	**Yes**	
	Does the plan include the necessary training/support to ensure compliance?	**NA**	
7.	**Process for Monitoring Compliance**		
	Are there measurable standards or KPIs to support monitoring compliance of the document?	**NA**	
8.	**Review Date**		
	Is the review date identified and is this acceptable?	**Yes**	**3 years**
9.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for coordinating the dissemination, implementation and review of the documentation?	**Yes**	
10.	**Equality Impact Assessment (EIA)**		
	Has a suitable EIA been completed?	Yes	

Committee Approval (Paediatric Guidelines Group)			
If the committee is happy to approve this document, please complete the section below, date it and return it to the Policy (document) Owner			
Name of Chair	**A**lexandra Jones	**Date**	**2**9/5/2026
Ratification by Management Executive (if appropriate)			
If the Management Executive is happy to ratify this document, please complete the date of ratification below and advise the Policy (document) Owner			
Date: n/a			

4. Appendices

Diaphragmatic Breathing

Diaphragmatic breathing technique

1. Lie on your back on a flat surface or in bed, with your knees bent and your head supported. You can use a pillow under your knees to support your legs. Place one hand on your upper chest and the other just below your rib cage. This will allow you to feel your diaphragm move as you breathe.

2. Breathe in slowly through your nose so that your stomach moves out against your hand. The hand on your chest should remain as still as possible.

3. Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips *(see "Pursed Lip Breathing Technique")*. The hand on your upper chest must remain as still as possible.

When you first learn the diaphragmatic breathing technique, it may be easier for you to follow the instructions lying down, as shown on the first page. As you gain more practice, you can try the diaphragmatic breathing technique while sitting in a chair, as shown below.

To perform this exercise while sitting in a chair:

1. Sit comfortably, with your knees bent and your shoulders, head and neck relaxed.
2. Place one hand on your upper chest and the other just below your rib cage. This will allow you to feel your diaphragm move as you breathe.

3. Tighten your stomach muscles, letting them fall inward as you exhale through pursed lips *(see "Pursed Lip Breathing Technique").* The hand on your upper chest must remain as still as possible.

Note: You may notice an increased effort will be needed to use the diaphragm correctly. At first, you'll probably get tired while doing this exercise. But keep at it, because with continued practice, diaphragmatic breathing will become easy and automatic.

How often should I practice this exercise?

At first, practice this exercise 5-10 minutes about 3-4 times per day. Gradually increase the amount of time you spend doing this exercise, and perhaps even increase the effort of the exercise by placing a book on your abdomen.