

It's A Gut Feeling: Abdominal Pain in Children

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Introduction

- Common Symptom
- Affects 10-15% of school-aged children
- Definition (Dr. John Apley)
 - 3 episodes of pain over 3 months
 - Interferes with normal daily activities
 - Any child that seeks medical attention

Causes

- Functional abdominal pain
 - 90% of children
- Organic
 - 10% of children
- How to tell if serious?
 - Parents want an answer
 - How much testing to do

Functional Abdominal Pain

- No treatable cause found
- Irritable bowel syndrome
- Hypersensitivity disorder
 - Visceral hyperalgia
- Not wimpy kids

Symptoms of Functional Pain

- Age greater than 5 years-old
- Pain-free periods
- Periumbilical pain
- No relationship to eating, stools, stress, etc
- Headaches, dizziness, appear pale

Symptoms of Functional Pain

- Fatigue or weakness
- Pains in arms and legs
- School absence but good student
- Pain interfering with activities out of proportion to evaluation
- Often a history of colic or feeding problems
- No red flags

Red flags Suggesting Serious Problem

- Age less than 5 years-old
- Weight loss or poor growth
- Pain away from the belly button
- Vomiting
- Night-time pain

Red flags Suggesting Serious Problem

- Diarrhea (night-time)
- Blood in the stool
- Fever
- Rash or joint pain
- Family history of ulcers, inflammatory bowel disease
- No school absenteeism

Screening Tests

- Thorough history (without parents)
- Physical exam including growth chart
- Stool for blood
- CBC
- ESR
- UA
- Celiac screen
- Missed disease rare

Treatment

- Avoid excessive tests
- Explanation of RAP
 - Not faking it
 - Similar to headache
- Encourage regular routine
- School attendance
- Adequate sleep

Treatment

- High fiber diet
- Peppermint
- Healthy diet
 - Fast food
 - Caffeine
 - Spicy foods
- Identify any stressors

Stressful Stimuli

- Physical Stress
 - Recent physical illness
 - Milk intolerance
 - Constipation

Stressful Stimuli, cont.

- Emotional Stress
 - Illness in family member
 - School problems
 - Recent move

Treatment

- Counseling
 - Treat anxiety
 - Help family promote adaptive behaviors
 - Children very suggestible
 - Coping mechanisms
- Medications
 - Antispasmodics
 - Amitriptyline

Prognosis

- One-third resolve within few months
- One-third replace abdominal pain with new symptom
- One-third continue with pain

Common Causes

- School avoidance
- Constipation/Encopresis
- Muscle pain
- Urinary Tract Infection
- Physical or sexual abuse
- Food allergies
- Parasites
 - Giardia, Blastocystis

Common Causes, cont.

- Lactose Intolerance
 - Onset 4-6 years-old
 - Bloating, diarrhea, gas
 - Breath test or dietary exclusion
- Carbohydrate Intolerance
 - Fructose (fruit and juice, soft drinks)
 - Sorbitol (fruits, sugar-free candy and gum)

Common Causes, cont.

- Irritable bowel syndrome
 - Abnormal contractions or sensation of the intestine
 - Not a psychological illness
 - Non-ulcer dyspepsia
 - Diarrhea-predominant
 - Constipation-predominant

Common Causes, cont.

- Irritable bowel syndrome
 - Rome criteria
 - Pain relieved by stools
 - Altered stools at time of pain
 - Altered stool frequency at time of pain
 - Mucus in stools
 - Bloating

Common Causes, cont.

- Irritable bowel syndrome treatment
 - Probiotics
 - Chamomile or peppermint tea
 - Peppermint
 - Relaxation techniques
 - Medications
 - Antispasmodics
 - Amitriptyline

Common Causes, cont.

- Gastroesophageal reflux
 - History of spitting up as a baby
 - Heartburn or regurgitation
 - Epigastric or chest pain
 - Dysphagia
 - Treatment
 - Maalox or Mylanta
 - Acid suppression

Common Causes, cont.

- Eosinophilic Esophagitis
 - Reflux symptoms
 - Dysphagia
 - Related to food allergies
 - Treatment
 - Elimination diet
 - Inhaled steroids

Ulcers

- Somewhat rare
- Night-time pain, vomiting
- Etiology
 - Ibuprofen
 - Helicobacter pylori
 - 20% of children
 - Blood test, stool test, EGD

Gallstones

- Rare
- Think if blood disorders, obesity, OCP' s
- Symptoms
 - Upper abdominal pain after meals
 - Increasing pain lasting 1-4 hours
 - Associated with vomiting

Inflammatory Bowel Disease

- 25% of patients less than 18 years-old
- Family history in 30%
- Autoimmune disease
- Ulcerative colitis
 - Diarrhea, urgency, blood or mucus
- Crohn's disease
 - Weight loss, pain, diarrhea

Celiac disease

- Common (1:100-200 people)
- Gluten (wheat, rye, barley)
- Variable symptoms
- Screen with antibody tests
- Diagnose with EGD
- Gluten-free diet for life

Cyclic Vomiting Syndrome

- Migraine Equivalent
- Recurrent episodes of pain and vomiting
- Seasonal
- Diagnosis of exclusion
- Treatment
 - Abortive therapy (Zofran, NSAIDs)
 - Preventative