A Dim View of Children
UNDERSTANDING & TREATING CHILDHOOD BELLYACHEs

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Bellyache Agenda

• Epidemiology
• FGIDs and the BPS model of practice
• Introduce Rome criteria for FGIDs
• Management of chronic abdominal pain
• Biliary Dyskinesia: Is it new? Is it true?
ONE IN TEN CHILDREN GOES TO A CLINICIAN FOR CHRONIC OR RECURRENT ABDOMINAL PAIN
Diagnosing Chronic Abdominal Pain in Norwegian Children: Disease is Infrequent

- IBS, 61
- Abdominal Migraine, 33
- Aerophagia, 22
- Functional Abdominal Pain, 22
- Functional Dyspepsia, 14
- CVS, 9
- Functional Constipation, 8
- Rumination, 2
- None, 18
- Organic Disease, 10

Total # of Patients: 152

MOST CHRONIC OR RECURRENT ABDOMINAL PAIN IS NOT CAUSED BY DISEASE
WARNING SIGNS OF DISEASE

• Weight loss
• Blood in stool
• Fevers
Functional Gastrointestinal Disorders (FGID)

... Chronic or recurrent symptoms not explained by structural, biochemical or psychiatric abnormalities...
More than half of all outpatients have functional disorders.
Biomedical vs the Biopsychosocial Model

BM?  BPS?
Disease
Objective
anatomic
abnormalities
and/or
pathophysiology

Illness
Suffering,
decreased
capacity for
functioning in
life’s activity
Medical Model

Disease
- pus
- blood

Not Disease
<table>
<thead>
<tr>
<th>Medical Model</th>
<th>Disease</th>
<th>Not Disease</th>
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Medical Model  Clinician’s Response to Bad Patient
Irritation
Anxiety
Helplessness
Anger
Avoidance
Psychiatrist’s Evaluation

• It’s not an eating disorder
• You’re a little anxious and a little depressed, but that’s to be expected when you are suffering and no one can tell you what is wrong
• Find a better gastroenterologist
Conventional Medicine

THE GAP

Conventional Mental Health
Biopsychosocial Model

Illness

Disease

Mental Disorder

Development

Functional

Culture and Society
CHRONIC FUNCTIONAL ABDOMINAL PAIN DISORDERS

- Irritable bowel syndrome
- Functional dyspepsia
- Functional abdominal pain
- Functional abdominal pain syndrome
Irritable Bowel Syndrome
Diagnostic Criteria

2 months or more

1. Abdominal discomfort or pain
2. Associated with diarrhea or constipation or alternating diarrhea and constipation
3. Discomfort may be relieved by defecation.
4. No evidence of an inflammatory, anatomic, metabolic or neoplastic process to explain the symptoms

Rasquin A et al. Gastroenterology. 2006; 130:1527
Functional Dyspepsia Diagnostic Criteria

Must include 2 months or longer:

- Persistent or recurrent pain or discomfort centered 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 (i.e. not IBS)
- No evidence of an inflammatory, anatomic, metabolic or neoplastic process to explain the symptoms

Rasquin A et al. Gastroenterology. 2006; 130:1527
Functional Abdominal Pain
Diagnostic Criteria

Must include at least 2 months of:
• Episodic or continuous abdominal pain
• Insufficient criteria for other FGIDs
• No evidence of an inflammatory, anatomic, metabolic or neoplastic process that explains the subject’s symptoms

Rasquin A et al. Gastroenterology. 2006; 130:1527
Stressful Events Predict

- Onset of FGIDs
- Symptom exacerbation and health seeking
- IBS symptom intensity

FGID Management
I hope he finds something

She loves school and has many friends

I want some tests!

It is not in her head!

I hope he does not find anything

I do not know why I’m here

I hope it is not cancer

No tests please!

I do not know why I’m here
GI Doctor’s Agenda

- Electronic medical record
- Cost effective, evidence based medicine
- Strength and honor
- Efficiency and excellence
- Functional vs disease?
- Biopsychosocial model
- ROME Criteria
GI Doctor’s Agenda

- Child’s point of view
- Emotions are tough to deal with
- I am not trained in psych
- Time’s a wasting
- Do I hire a psychologist?
- Listening to these people wears me out
NO LAB TESTS FOR FGIDS

- Symptom-based diagnostic criteria
- Rule of ONES
- Exclude disease
- Time as a diagnostic ally
I agree with Paul about the Rule of Ones
AFFERENT CHRONIC PAIN PATHWAYS

Frontal Lobe

Sensory Cortex

Arousal Centers

Afferent sensory nerves
Standard Pharmocotherapy?

- Double blind placebo RCT of 10 mg amitriptyline for IBS in adolescents. Amitriptyline improved quality of life.
- Muticenter RTC of low dose amitriptyline. Both placebo and amitriptyline reduced pain in 80%.
- Single center small RCT celexa improved abdominal pain
Are there any suicidal risks with antidepressants?

What are the side effects?

Clinic for Pediatric Functional GI Disorders

Trust me... I know what I am doing!

I am not depressed!
Disability associated with functional gastrointestinal disorders is proportional to co-existing psychological distress.
In preteens and teens with an FGID, disability is proportional to the patient’s perception of their own academic or social incompetence.
For children disabled by a FGID, treatments such as CBT, hypnosis, and psychotropic drugs improve coping and resolve psychological distress and symptoms. Treatment targeting the CNS is often more successful than treatment targeting the GI tract.
**FGID TREATMENT HIERARCHY**

- INTERdisciplinary approach
- Psychological treatments
- Rehabilitation

**Severe**
- Manage stress
- Pharmacotherapy

**Moderate**
- Diet, lifestyle
- FGID diagnosis

**Mild**
Rapid Diagnosis

• “Are you saying that 3 or 4 days a week for the past two months you had bellyaches that felt better after a poo, and the poo came out too hard, and it felt like you could not get it all out?”

• “Then you have Irritable Bowel Syndrome!”
Treatment Options for IBS

• Education only
• FODMAPS diet: low fermentable carbs
• Psychological treatments: CBT, hypnosis
• Drugs
• Combinations of the above
Rapid Diagnosis

• “Are you telling me that you get bellyaches after every meal? You feel bloated and nausea?”

• “Why, you have Dyspepsia. We can begin treating it today because 85% of children with dyspepsia have functional dyspepsia and no disease. Or, if you need to know for sure, we can scope.”

• “What would be better for you?”
Effective Reassurance

- Establish a therapeutic alliance
- Answering the 4 Questions:
  - It’s IBS
  - It’s not dangerous
  - It comes and goes
  - There are things we can do
- Promise of continuing availability
Biliary Dyskinesia

“Nonspecific vague abdominal pain and nausea, abnormal CCK-HIDA and absent gallstones.”

“Biliary dyskinesia a new indication for cholecystectomy, a 700% increase in last 13 yrs”
Bielefeldt K. Aliment Pharmacol Ther 2013; 37:
Nuclear Medicine or Unclear Medicine?

• CCK-HIDA may be influenced by many factors: diet, emotional state, CCK infusion rate
• No studies in normal children
• In adults with abdominal pain, studies done a week apart are normal and abnormal 50% of the time.
• In studies with children CCK HIDA did not correlate with response to laparoscopic cholecystectomy (S Misra. J Clin Gastroenterol 2011; 45: 814-7)
Vali Talbot with Dr Paul plays the Irish House Restaurant and Pub March 28, 2-3:30 pm