Program Handouts

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My Stomach Hurts

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Objectives

- List possible causes of abdominal pain, differentiating between urgent vs. mild or functional conditions
- Identify red flag symptoms and a plan if they occur
- Develop an approach for functional symptoms

Outline

- New onset vs. chronic problem
- Assessment
- Possible causes
- What you can and should do
- Red flags
- Tips and pearls
- Case studies

New Onset

New Onset: Assessment

- Sick or not sick
- Duration
- Intensity and location
  - Pain scale vs. observation and behavior
  - Quality and location; upper or lower
  - Diffuse or specific

New Onset: Assessment

- Accompanying symptoms
  - GI: vomiting, diarrhea, upper or lower GI bleeding, nausea
  - Extra-abdominal: fever, rash, lethargy, dehydration, sore throat, respiratory distress, headache, dizziness, pallor
New Onset: Assessment

- Any known health problems?
- Anyone sick at home?
- Current epidemics in school
- Consider psychosocial and gynecologic history
- Frequent flyer factor

New Onset: Poss. Causes

- GI surgical emergencies
  - Appendicitis
  - Malrotation with volvulus
  - Intussusception
  - Small bowel obstruction from a variety of other causes: adhesions, incarcerated hernias, Meckel’s diverticulum, tumors

- Acute medical conditions such as peritonitis, pancreatitis, gastroenteritis, hepatitis
- Trauma
- Gynecological
  - Menstrual and ovarian
  - Sexually related: infection, trauma, pregnancy, abuse

- Other various extra-abdominal causes
  - Strep throat
  - Pneumonia
  - UTI
  - Migraine

New Onset: Poss. Causes

- First presentation chronic condition
  - Crohn’s or ulcerative colitis, Celiac
  - Liver disease, pancreatitis
  - GERD
  - Constipation
  - Rheumatologic, neurologic or other non-GI disorders

- First presentation of a functional complaint or psychosocial problem
  - Dietary intolerances
  - IBS
  - Academic or social problem at school
  - Problems at home
  - Stress
New Onset: What To Do
- Follow your intuition
- Not sick—assess, rest, document, back to class
- Sick—call parent and send home
- Really sick—911
- Error on the side of caution: if you send them back to class, invite them to return if they get worse

New Onset: Pearls/Tips
- No need to make "diagnosis"
- Try a few simple things like going to the bathroom, talking and listening, rest, warm pack
- Anything but mild, quickly resolving symptoms deserves a call to the family

New Onset: Pearls/Tips
Red flags include:
- Sore throat or fever
- Vomiting or diarrhea
- Moderate to severe or point specific pain

New Onset: Pearls/Tips
Red flags include:
- Any GI blood loss
- Lethargy
- Rashes or jaundice
- Respiratory distress

Chronic Problem
- Sick or not sick
- Intensity and location
  - Pain scale vs. observation and behavior
  - Quality
  - Diffuse or specific
  - Upper or lower
**Chronic: Assessment**

- Accompanying symptoms
  - GI: vomiting, nausea, diarrhea, gas, constipation, upper or lower GI bleeding
  - Extra-abdominal: weight loss, fever, rash or other skin changes, lethargy, headache, pallor, joint/muscle pain, menstrual/gynecological complaints

- Timing: after lunch or consistent class
- Any known health problems?
- Frequent flyer?
- Current school performance or social concerns
- Consider psychosocial and gynecologic history
- Any problems at home?

**Chronic: Poss. Causes**

- GI: organic (more common)
  - Constipation
  - Acid peptic diseases (GERD, etc)
  - Lactose/fructose intolerance
  - Infectious (c diff, parasites, h pylori)
  - Medication induced (NSAIDS)

- GI: organic (less common)
  - Gall bladder disease
  - Chronic hepatitis
  - Inflammatory bowel disease
  - Celiac disease
  - Pancreatitis

- Non-GI organic: common
  - Urinary tract infections
  - Dysmenorrhea, PID
- Non-GI organic: less common
  - Sickle cell disease
  - Lead poisoning
  - Henoch-Schonlein purpura

- Non-organic
  - Irritable bowel syndrome
  - Functional abdominal pain
  - Dyspepsia
  - Abdominal migraine
  - Abuse
  - Stress
Chronic: What to Do

- Identify the children early on
- Have a red flag number of health room visits
- Contact the family
- Get exchange of information forms for primary and subspecialty providers

Chronic: What to Do

- Avoid disruption in academics
- Maximize time in the classroom
- Support social success

Chronic: What to Do

- Recommend medical evaluation starting w/PCP then pediatric GI to establish organic vs. functional
- May (rarely) find serious diagnosis or may find easy to treat diagnosis such as GERD or constipation
- May be identified as functional

Chronic/sick: What to do

- Examples: IBD (Crohn’s & UC), Celiac, chronic pancreatitis, chronic hepatitis, other liver diseases, liver failure
- Anticipate frequent absences at least initially, initiate academic support early
- Anticipate will have fluctuations in health/attendance
- May periodically not have energy for school

Chronic/sick: What to Do

- Be in contact with providers/family
- Flexible support/schedule as needed
- Teach support staff to take complaints seriously
- Ask about accommodations such as dietary needs or liberal bathroom privileges

Chronic/mild: What to Do

- Avoid home tutors and other supports to school absence
- Consider graduated return
- Monitor for improvement in attendance
- Ensure bathroom privileges
- Facilitate dietary needs
**Functional: What Is It**

Chronic abdominal pain very common
- Recent study found 75% of teens have some abdominal pain complaints, 13 to 15% have on weekly basis
- Generally quoted 10 to 15% of school age see a provider for episodes of recurrent pain, additional 10 to 15% have but don’t seek care
- Most do not have significant underlying disease

**Functional: What Is It**

- Many names
  - Functional (best), recurrent or chronic abdominal pain
  - IBS
  - Dyspepsia
  - Abdominal migraine
  - Common theme: real pain, no organic cause discernable

**Functional: What Is It**

Diagnosis of functional pain
- 4 to 18 years old
- Interrupts activities
- PE normal
- No alarm symptoms (poor growth/weight loss, GI blood loss, chronic severe diarrhea, significant vomiting, persistent RU or RLQ pain, family history)

**Functional: What to Do**

- Treatment begins with diagnosis, reassurance, return to normal expectations
- May also include: lifestyle changes (e.g., diet changes, decrease in over-achieving, avoiding smoking), acupuncture, therapy, exercise, medication, etc.
- Goal is return to function, vs. No pain
- Easing back to school may help

**Tips for Chronic Pain**

- Chronic abdominal pain as single symptom is rarely associated with concerning organic illness
- Red flags include: accompanying symptoms, psychosocial distress, change in complaints, change in academic performance
- As soon as you identify an attendance problem, encourage medical evaluation
Tips for Chronic Pain

- Get information releases signed as early as practical
- Identify a reasonable attendance expectation
- Coordinate a consistent approach
- The longer kids are out of school, the harder it is to go back

Case Study # 1: Amy

- 17 year old female
- Cc: LLQ abdominal pain x 2 months with significant daily nausea and vomiting

Case Study: Amy

HISTORY OF PRESENT ILLNESS

- Daily vomiting x 2-3 weeks, increasing
- Abdominal pain, epigastric and LLQ
- Poor appetite, tolerates fluids well, 6-7 cans soda daily
- 3-4 lb wt loss
- Seen in PCP office 3 days ago
- Remaining history vague

PAST MEDICAL/SOCIAL/FAMILY HISTORY

- Seen in GI 2 years before for constipation and GER
- Has asthma, multiple visits in ER over last year
- Ovarian cyst 2 months ago, narcotic pain meds
- Senior in high school, missing lots but social, active, has boyfriend
- Adopted at 4 months age

PHYSICAL EXAM

- Height 50 %, weight 75 %
- Teary, arguing w/mother, new tattoo
- Moderate distress, flushing/pale, dry heaves
- Abdomen mildly diffusely tender

DIAGNOSTIC EXAMS

- Abdominal CT mild ileus, fecal impaction
- Pelvic CT 3 months ago, free fluid, possible PID
- EGD 2 years ago, normal
- No current labs
Case Study # 2: Austin

- 10 year old male
- Cc: intermittent abdominal pain x 4 months, significant enough to miss 18 days of school.

HISTORY OF PRESENT ILLNESS

- Periumbicular abdominal pain, moderate to severe, crampy, often after meals
- No precipitating events or illnesses
- Nothing helps, nothing makes worse
- ER visits x 2, no diagnosis

Stool 2 x per week, 3” diameter, occasional blood, soiling

No other symptoms

PAST MEDICAL/SOCIAL/FAMILY HISTORY

- Only child, attends academically rigorous, private school
- Negative PMH
- Negative family GI history
- No workup to date

PHYSICAL EXAM

- >95 % height, 90 % weight
- Quiet, NAD
- Decreased bowel tones
- Mass LLQ, non tender, moveable
Case Study # 3: Tasha

- 15 year old female
- Cc: Mild, diffuse abdominal pain for last 4 months with significant exacerbation over last few days

HISTORY OF PRESENT ILLNESS

- Previously, mild, intermittent abdominal pain, accompanied by reflux
- Now, severe, colicky RUQ pain
- One episode of bilious emesis

PAST MEDICAL/SOCIAL/FAMILY HISTORY

- Lives with mother
- Junior in high school, active, athletic, good student
- Described as healthy, but a “drama queen”
- Negative family history

PHYSICAL EXAM

- Height: 5th %, Weight 75%
- Nontoxic but in acute distress
- Abdomen tender to palpation over RUQ
- Remainder noncontributory

DIAGNOSTIC EXAMS

- Normal CBC w/diff and CMP
- Normal UA
- Normal abdominal CT and US

PART 2

- Returned 1 year later, severe pain
- Low level RUQ pain always, with intermittent 2-3 day exacerbations of severe pain
- Seen in local ER, referred back to GI
- Multiple family members w/gall bladders removed at young age
Case Study: Tasha

DIAGNOSTIC EVALUATION
- Abd ultra sound: upper limits of normal for common bile duct
- ERCP (endoscopic retrograde cholangiopancreatography) arranged for, normal result, but excruciating pain at time of injection.
- Remaining labs normal

Case Study # 4: Chloe

- 10 year old female
- Cc: Abdominal pain

Case Study: Chloe

HISTORY OF PRESENT ILLNESS
- Periumbilical crampy pain for 3 months, missing school
- Diagnosed with constipation and treated through PCP without significant improvement

PAST MEDICAL/FAMILY/SOCIAL HISTORY
- Lives with parents, no siblings
- No significant family or medical history
- In 4th grade, doing well academically, some social concerns

PHYSICAL EXAM
- Height/weight proportionate but hx of 8 lb wt. loss, WDWN
- Pale, with dark circles under eyes
- Anxious, clingy, fearful affect, physically draping herself over mom
- Abdomen mildly, diffusely tender

DIAGNOSTIC WORK UP
- Extensive but negative
- Abdominal ultra sound and CT
- KUB’s showing constipation
- CBC, CMP, ESR, TTG normal
References