Irritable Bowel: Evaluation and Management

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1:30 – 2:15 PM
Objectives

• Define Irritable Bowel

• Demonstrate Knowledge of Rome Criteria

• Know the Red Flag Signs for Irritable Bowel Syndrome
Question 1

Which of the following is NOT a Red Flag Sign for Irritable Bowel?

- A. Weight Gain
- B. Fever
- C. Rectal Bleeding
- D. Anemia
Question 1 answer

• Which of the following is NOT a Red Flag Sign for Irritable Bowel?

• A. Weight Gain
• B. Fever
• C. Rectal Bleeding
• D. Anemia
Anatomic or Functional?

Characterized by chronically recurring abdominal pain or discomfort with altered bowel habits

Criteria require no detectable organic cause making it a functional disorder
Rome III Criteria

Recurrent abdominal pain or discomfort at least 3 days per month for the past 3 months associated with two or more of:

- Improvement with defecation
- Onset associated with a change in frequency of stool
- Onset associated with a change in form (appearance) of stool

**AND** At least 6 months since symptom onset
Subgroups

Diarrhea predominant – more common in men

Constipation predominant – more common in women

Alternating or mixed – the most common subgroup
Relationship to other Functional Disorders

Functional (non-ulcer) dyspepsia – 30% overlap

Additional functional syndromes seen with IBS
- Fibromyalgia
- Chronic Pelvic Pain
- Interstitial Cystitis
Co-existing Psychological Conditions
- Anxiety
- Somatization
- Symptom related fears

These contribute to:
- Quality of life impairments
- Excessive use of health care
Association with enteric infections

- Symptoms like IBS develop in 10% of adults with bacterial/viral enteric infections.

Risk factors:
- Female gender
- Longer duration of gastroenteritis
- Psychosocial factors – especially stressors
Factors that suggest “Brain-gut disorder”

- Association with stress

- Frequent coexisting psychiatric disorders

- Responsiveness of symptoms to therapy directed toward the CNS
Possible mechanisms - 1

- Alterations in motility & coordination of motility

- Changes in the balance of absorption & secretion of the in the intestines

- May be related to the gut-based serotonin signaling system
Possible mechanisms - 2

- Increased perception of visceral stimuli may contribute to pain and discomfort

- ? Alterations in immune activation of mucosa

- ? Alterations in intestinal microflora
Evaluation

• Careful history taking
• General Physical examination
• Routine Laboratory Studies

• This is sufficient for patients who have symptoms that meet Rome criteria if no Red Flag signs are present.
Red Flag Signs

Rectal Bleeding
Anemia
Weight loss
Fever
Family history of colon cancer in 1\textsuperscript{st} degree relative
Onset after age 50
Major change in symptoms
Red Flag Signs

If present:

CBC
TSH
Stool testing for bacterial pathogens, O & P, C. diff by PCR
Colonoscopy
Additional testing needed

- Diarrhea predominant needs serologic testing for celiac disease

- Possibly colonoscopy with biopsy to rule out microscopic colitis
Additional testing needed

- Constipation predominant needs sitz marker study to rule out pelvic floor dysfunction
When other conditions are ruled out

• Make a positive diagnosis!

• It can be very helpful for the patient to know that the specificity of the Rome criteria if no Red Flags are present is over 90%. Full criteria are associated with a 98% specificity.
When other conditions are ruled out

• Explanation of the pathophysiology is important to the patient and needs to be offered in a way that demonstrates that we take the symptoms seriously
One Clinician’s Approach

• Based on current research understandings of IBS, I review that there are multiple components to IBS.

• Incoordination of the various parts of GI tract

• Increased visceral sensitivity
Incoordination of the various parts of GI tract

• I explain that one part of the GI tract is ready to send on the waste stream and next part isn’t ready to receive it. This leads to the visible bloating seen by patients.

• This also explains the alternating pattern of firmer and looser stools that is the most common pattern in IBS
Increased visceral sensitivity - 1

• I explain research studies have shown that patients meeting Rome criteria have pain with the inflation of a balloon in the rectum.

• Anyone would, but the IBS patient has pain at the lower volume of air in the balloon.
Increased visceral sensitivity - 2

• I hasten to add that studies have also shown that IBS patients are “tough” and not “wimps”.

• In the cold pressor test, subjects put their hand in a bucket of ice water and remove it when it is too painful.

• In this test, IBS patients leave their hands in the cold water longer than those without IBS.
Increased visceral sensitivity - 3

• I follow this with an explanation that much of the work of the brain is ignoring things.

• I give the example of feeling your socks when you put them on in the morning but then not feeling them all day. The brain ignores it.
Increased visceral sensitivity - 4

• It is in the context of having messages going back to the brain where the “volume is turned up” that I introduce the idea of needing a treatment that can help “turn the volume back down”.

• Which brings us to treatment!
Treatment

• A positive diagnosis is a frequently effective first step

• RCTs are unusual in IBS Rx. Studies are complicated by placebo response rates of up to 60%.

• FDA approval is even less common
Rx in Pain Predominant IBS

• Antispasmodic agents – like hyoscyamine or mebeverine frequently used but RCTs show no benefit

• Tricyclic anti-depressants have shown benefit for the symptom and the IBS
  • Amitriptyline
  • Desipramine

Diet in Diarrhea Predominant IBS

- AVOID
  - Sorbitol – especially in sugar free soda
  - Caffeine
  - Inulin
  - Chicory
Rx in Diarrhea Predominant IBS

- Loperamide – 2 mg initial dose – can use up to 4 mg for times daily

- Alosetron - 0.5 mg twice daily, can use 1.0 mg twice daily – for women only and previously withdrawn from market due to ischemic colitis

- (Rifaximin – 400 mg three times daily) - no evidence to support repeated treatment

Rx in **Constipation** Predominant IBS

- Polyethylene glycol – 17 grams initial – up to 34 grams twice daily
- Lactulose – 10 – 20 grams initial – up to 20 – 40 grams twice daily
- Lubiprostone – 24 microgram, twice daily
- Linaclotide – 145 or 290 mcg once daily before meal

Diet in **Constipation** Predominant IBS

- Fiber in diet or as supplement
- Total 30 – 40 grams fiber daily
Activity in **Constipation** Predominant IBS

- Increased Exercise often improves symptoms
Rx in Bloating Predominant IBS

- Probiotics – *Bifidobacterium infantis* 35624 – (Align) – the best studied with significant benefit for both the symptom and IBS

- FODMAPS diet
FODMAPS diet - 1

• FODMAPs (stands for Fermentable Oligo-saccharides, Disaccharides, Mono-saccharides and Polyols).

• FODMAPs can be poorly absorbed in the small intestine. Mal-absorbed carbohydrates are fermented by gut bacteria to produce gas. Current research strongly suggests that this group of carbohydrates contributes to IBS/FGID symptoms. FODMAPs are found in a wide range of foods.

http://www.med.monash.edu/cecs/gastro/fodmap/
Cognitive Behavioral Therapy

• Meta-Analysis of 17 studies showed 50% reduction in GI symptoms compared to waiting list with Odds ratio of 12 (95% Confidence Interval, 6 – 260)

• Number needed to treat - 2
• Modification of Dysfunctional Behaviors using - Relaxation
Cognitive Behavioral Therapy

- **Technique** – administered in group or individual sessions ranging from 4 – 15 sessions

- **Target Behaviors** – Catastrophic or maladaptive thinking patterns underlying the perception of somatic symptoms
Cognitive Behavioral Therapy

• Modification of Dysfunctional Behaviors using:
  
  • - Relaxation techniques
  • - Contingency management (rewarding healthy behaviors)
  • - Assertion training
Question 2

• Which of the following is NOT a Red Flag Sign for Irritable Bowel?

• A. Weight Loss
• B. Fever
• C. Rectal Bleeding
• Onset after age 30
Question 2 Answer

• Which of the following is NOT a Red Flag Sign for Irritable Bowel?

• A. Weight Loss
• B. Fever
• C. Rectal Bleeding
• D. Onset After Age 30
Summary

Irritable Bowel Syndrome is a specific condition with well defined criteria.

Work-up requires eliciting symptoms that define the condition and ruling out Red Flags that suggest a more serious etiology.

Treatment begins with acknowledgement of the reality and pathophysiology of the syndrome.

Mayer EA, NEJM 2008;358:1692-9