MAKING THE DIAGNOSIS OF IBS

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Learning Objectives

- Describe new data supporting the concept of IBS/CIC as a continuum of gastrointestinal disorders
- Implement appropriate, validated testing measures to make definitive, timely diagnoses of IBS/CIC
- Utilize patient-centric communications strategies to clearly educate patients about their condition

IBS/CIC, irritable bowel syndrome/chronic idiopathic constipation.

Case Study: Symptom/Family History

- A.T.: A 33-year-old woman sent for a second opinion
- 3-year history of altered bowel habits and lower abdominal pain present 2 to 3 days per week; transient relief after having a bowel movement (BM)
- May go 2 to 3 days without a BM, then has liquid stool
- Feelings of incomplete evacuation; strains to excess
- Describes a “lump” in her throat; can only eat small meals because she “fills up” so quickly—“like I ate Thanksgiving dinner”
Case Study: Symptom/Family History (cont’d)

- Reports bloating on many days; some days she looks “3 months’ pregnant”
- Has gained 40 lb in the last 3 years; BMI=33
- Frequently misses work due to symptoms
- She’s been told that she “might” have IBS
- No tobacco use; rare social alcohol use
- No prior surgery
- No family member with celiac disease, IBD, or any type of GI malignancy

BMI, body mass index; GI, gastrointestinal; IBD, inflammatory bowel disease; IBS, irritable bowel syndrome.

Case Study: Past Medical History

- Notable for TMJ syndrome, migraine headaches, and interstitial cystitis
- Labs 2 years and 1 year prior: normal CBC, BMP, TSH, and CRP on both occasions
- Stool studies x 2: normal
- Normal EGD 2 years ago
- Normal colonoscopy with random biopsies 1 year ago
- Normal RUQ ultrasound
- Normal thyroid ultrasound
- Normal CT scan of abdomen and pelvis

BMP, basic metabolic panel; CBC, complete blood count; CRP, C-reactive protein; CT, computed tomography; EGD, esophagogastroduodenoscopy; RUQ, right upper quadrant; TMJ, temporomandibular joint; TSH, thyroid-stimulating hormone.
Case Study: Physical Exam

- Examination of heart and lungs: normal
- Abdomen is soft with normal bowel sounds; no masses or guarding
- Some tenderness in bilateral lower quadrants; not distended
- Rectal exam reveals no masses
- During simulated evacuation, she contracts both the EAS and IAS

EAS, external anal sphincter; IAS, internal anal sphincter.

Case Study: Self-Management

- PEG-3350 helps constipation but not her abdominal pain or bloating
- Avoiding wheat has helped her bloating “a little”
- Loperamide prn helps diarrhea
- A.T. asks what her diagnosis is and whether any other tests are necessary

PEG, polyethylene glycol; prn, as necessary.
Diagnosis of IBS Can Be Tricky

No mathematical formula can make the diagnosis

\[ \sum \frac{\text{Abdominal pain}^3}{\text{Depression}^3 + \text{Anxiety}^2} + \Delta \frac{\text{Constipation/Diarrhea}}{\text{Diarrhea}} \times \text{Bloating} \]

\[ \Gamma' + \text{Anemia} + \text{nocturnal symptoms} \times \left( \text{Extraintestinal symptoms}^3 + \text{intestinal non-IBS symptoms} \right) \]

IBS, irritable bowel syndrome.

Used with permission from Dr. F.C. Mearin.
Making the Diagnosis of IBS: A Stepwise Approach

- Take a careful history
- Look for warning signs
- Perform a thorough exam
- Factor in epidemiology
- Use Rome IV criteria
- Classify into the appropriate subtype
- Consider limited diagnostic tests

History: Key Questions

- Onset of symptoms (acute, chronic)?
- Abdominal pain present?
- Constipation or diarrhea or both present?
- Other GI symptoms present?
  - Think overlap with other GI syndromes
- Presence of common non-GI symptoms?
- Prior tests?
- Prior treatments?
- Fears/concerns/worries?
Making the Diagnosis: Supporting Symptoms/Comorbid Conditions

- Supporting symptoms
  - Bloating

- Comorbid conditions
  - GERD, globus, noncardiac chest pain
  - Dyspepsia
  - Migraine headaches, TMJ syndrome
  - Fibromyalgia
  - Interstitial cystitis
  - Dyspareunia
  - Chronic back pain

GERD, gastroesophageal reflux disease; TMJ, temporomandibular joint.

Tip for Diagnosing IBS: The Patient’s Chart

Does your patient’s chart look like this?

ALLERGIES: sulfa (cough), penicillin (achy), ciprofloxacin (fatigue), metronidazole (funny taste), amoxicillin (spots in my eyes), aspirin (blotches), prednisone (can’t remember), diphenhydramine (fatigue), desipramine (constipation), PEG-3350 (diarrhea), dicyclomine (funny taste), hyoscyamine (cramps), linaclotide (diarrhea), lubiprostone (diarrhea), rifaximin (gas).
Alarm Features for Organic Disorders

- Unintended weight loss (>10% in 3 months)
- Blood in stool not caused/confirmed by hemorrhoids or anal fissures
- Symptoms that awaken the patient
- Fever
- Anemia
- Palpable mass, ascites, lymphadenopathy
- Family history of CRC, IBD, polyposis syndromes, or celiac disease

If alarm features are present, investigate and treat appropriately.

CRC, colorectal cancer; IBD, inflammatory bowel disease

The Value of a Physical Examination

- Organic disorders can masquerade as IBS
- New diseases/disorders develop over time
- Physical exam validates the patient’s reporting
- “Laying on of hands” reassures the patient
- Optimizing value:
  - Don’t forget the Carnett’s test
  - Watch for the “closed eyes” sign
  - Identify pelvic floor dyssynergia if present
**Carnett’s Sign**

**STEP 1:** Identify and palpate the point of maximal abdominal tenderness in resting supine position (rest position).

**STEP 2:** Palpate abdomen while patient raises both legs or while patient raises head and shoulders (tense position).

**Positive Carnett’s sign**
Palpation of abdominal muscles in tense position elicits same or more tenderness as in rest position; indicates musculoskeletal source of tenderness (eg, abdominal wall pain).

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**Digital Rectal Exam: Position 1**

- Check anal tone at rest
- Ask patient to squeeze

Digital Rectal Exam: Position 2

- Insert finger deeper and feel puborectalis muscle
- Ask patient to squeeze

Symphysis pubis
External anal sphincter
Puborectalis
Internal anal sphincter

Digital Rectal Exam: Expulsion

- Normal response (shown)
  - Almost pushes out finger
- In pelvic floor dyssynergia, contraction of EAS/IAS
  - Clamps down around finger

EAS, external anal sphincter; IAS, internal anal sphincter.

**Factor in Epidemiology: IBS is Common**

- US prevalence 12% to 14%
  - Diabetes: 9%
  - Thyroid disorder: 6%
- Most common GI disorder addressed by gastroenterologists
- Most common reason for referral to a gastroenterologist
- Much more common than celiac disease (prevalence 0.4%)
- Much more common than IBD (prevalence 0.03%)

GI, gastrointestinal; IBD, inflammatory bowel disease; IBS, irritable bowel syndrome.


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**Rome IV Criteria for IBS**

Recurrent abdominal pain at least 1 day/week (on average) in the last 3 months associated with ≥2 of the following:

- Related to defecation
- Associated with a change in frequency of stool
- Associated with a change in form (appearance) of stool

Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis.
IBS Subtypes Based on Stool Consistency: Rome IV Classification

<table>
<thead>
<tr>
<th>Bristol Stool Form Scale</th>
<th>Days With Abnormal BMs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type 1:</strong> Separate hard lumps, like nuts (hard to pass)</td>
<td>IBS-C Hard/lumpy stools ≥25% Loose/watery stools &lt;25%</td>
</tr>
<tr>
<td><strong>Type 2:</strong> Sausage-shaped but lumpy</td>
<td></td>
</tr>
<tr>
<td><strong>Type 3:</strong> Like a sausage but with cracks on its surface</td>
<td>IBS-M Hard/lumpy stools ≥25% Loose/watery stools ≥25%</td>
</tr>
<tr>
<td><strong>Type 4:</strong> Like a sausage or snake, smooth and soft</td>
<td></td>
</tr>
<tr>
<td><strong>Type 5:</strong> Soft blobs with clear-cut edges (passed easily)</td>
<td></td>
</tr>
<tr>
<td><strong>Type 6:</strong> Fluffy pieces with ragged edges; a mushy stool</td>
<td>IBS-D Hard/lumpy stools &lt;25% Loose/watery stools ≥25%</td>
</tr>
<tr>
<td><strong>Type 7:</strong> Watery, no solid pieces; entirely liquid</td>
<td></td>
</tr>
</tbody>
</table>

BMs, bowel movements; IBS-C, irritable bowel syndrome with constipation; IBS-D, irritable bowel syndrome with diarrhea; IBS-M, mixed irritable bowel syndrome.


Rome IV: Limited Diagnostic Testing Helps Make a Positive Diagnosis

- In the appropriate patient, consider:
  - CBC, CRP (or ESR), fecal calprotectin
  - Celiac serologies
- Not all patients require testing
- No role for colonoscopy in every patient
- Take-home message: Make a positive diagnosis based on symptoms and limited testing and initiate treatment

CBC, complete blood count; CRP, C-reactive protein; ESR, erythrocyte sedimentation rate.

### Making a Positive Diagnosis: Use Clear, Patient-Centric Language

<table>
<thead>
<tr>
<th>Clear</th>
<th>Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>“She has...”</td>
<td>“...may be having...”</td>
</tr>
<tr>
<td>“He is suffering from...”</td>
<td>“...it is possible that...”</td>
</tr>
<tr>
<td>“...has been diagnosed with...”</td>
<td>“...quite fits the picture of...”</td>
</tr>
<tr>
<td>“...the diagnosis is that of...”</td>
<td>“...is probably a reasonable label...”</td>
</tr>
<tr>
<td>“You definitely have...”</td>
<td>“...working impressions...”</td>
</tr>
<tr>
<td>“I have diagnosed you with...”</td>
<td>“...managed as a case of...”</td>
</tr>
</tbody>
</table>


### Summary: 7 Key Features of the Positive Diagnosis of IBS

1. **Clinical history**
   - Medical, surgical, dietary, psychological
   - Alarm/warning signs
2. Check for warning signs
3. **Physical examination**—include digital rectal exam
4. Factor in epidemiology
5. **Use Rome IV criteria and IBS subtypes**
6. **Minimal (limited) laboratory tests**
7. **Use clear language**—be positive