Irritable Bowel Syndrome (IBS)

Very Treatable !!

Digestive Health Clinic
Marquette General Health System

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The true map of the U.P.
IBS, also called...

- Spastic Colon
- Irritable Colon
- Nervous Colon
- Some still use “Spastic Colitis” *

* Do not use of the term “Colitis” for IBS, as you could impact their insurance access...
Know that the “Surrell Rule” is still in effect …

The first person to go to sleep in class today…
And don’t try any of your old “sleep through class” tricks, because I have used them all...
**Irritable Bowel Syndrome**

- By definition, IBS is a **syndrome**
- IBS is **NOT** a specific disease process
- Symptoms can be crippling to lifestyle
- Costs of diagnosis and treatment can be significant – Upper endoscopy, colonoscopy, C.T. scans, x-rays, E.R. visits, medications, lost work, others
Magnitude of IBS Problem

- Affects about 20% of general population
  - 60 million people in USA
- 100,000 annual hospital admissions
- Must rule out organic disease
  - Infection, Colitis
  - Peptic ulcer, gallbladder disease
  - Malignancy, Diverticulitis
  - Appendicitis, Ischemic Bowel
  - Other abdominal lesion or pathology
- So... medical work-up can be very costly
IBS – Lost Work Time

“Normal” work or school absences average 5 days per year

“IBS-related” work or school absences average 13 days per year

Very costly to individual and to society
IBS Characteristics

- 2/3 Women, 1/3 Men – in USA
- More common in younger patients
- Unusual onset after 50 years
- Flare-ups may be stress-related, but often no precipitating event known
IBS is Worldwide Problem

Doctor Visits by Gender is Variable

- USA – more common in females
- Africa – Equal in males and females
- India – More common in males
Prevalence of IBS Doctor Visits

- Primary Care = 12 % of entire patient base
- Gastroenterology = 28 % of patient base
- Colorectal Surgery Practice = ???
IBS defined…

If you have IBS, contrary to what you may have been told by your friends, spouse, sibling, parent, or others…

IBS does NOT stand for…
Irritable Brain Syndrome
Classic IBS Symptoms

- Tend to be chronic and recurrent
- Crampy lower abdominal pain
- Abdominal bloating
- Altered bowel pattern
  - Stool urgency with diarrhea (NOBM)
  - Alternating diarrhea/constipation
  - Constipation
- Pain is most common in the LLQ, but often is in moving and inconsistent (cramps)
IBS Symptoms

- Symptoms not explained by structural or biochemical abnormalities
- Therefore, diagnostic tests including endoscopy, x-rays, labs, etc. usually normal
- Usually no significant psychological component, but symptoms may cause anxiety or depression
Classic IBS …

- Abdominal Pain
- Subjective change in bowel habits
- Most commonly diarrhea and stool urgency (NOBM)
- Absence of physical findings
- Pain often relieved with bowel movement
General IBS Clinical Criteria

- Abdominal pain
- Irregular & unpredictable bowel pattern
- Very common - Diarrhea of > 21 stools per week
- Common - Alternating diarrhea and constipation
- Much Less common - Constipation of < 2 stools per week
- Very common - Altered life style
Manning Criteria for IBS (1978)

- Loose stools at onset of abdominal pain
- More frequent stools
- Pain relief with bowel movements
- Visible abdominal distension

**Note:** Presence of these symptoms tends to favor IBS over other organic cause of the abdominal pain.
Rome II Criteria (1998)

- Abdominal pain present 25\% of the time for the past three months
- Pain relieved by defecation
- Change in stool consistency or frequency
IBS - UGI X-ray Studies

- More rapid S.B. transit time
- Increased esophageal motility
- Usually normal gastric emptying
Mechanism of IBS Symptoms

- Known overall increased G.I. motility
- Known increased sensitivity to pain from colonic stretch receptors

Therefore → Is IBS really “colonic hypersensitivity”, triggered by stress and/or other factors?
IBS and Stress

- IBS patients show higher stress levels on psychometric testing
- Common life stress events – death in family, job or residence changes, relationship issues, personal or family illness, financial problems, others → often worsen IBS
- Both men and women IBS patients tend to worry over trivial problems
Bottom Line on IBS and Stress

Stress $\rightarrow$ increased colonic motility $\rightarrow$ IBS symptoms $\rightarrow$ Stress

Cycle then repeats itself...
IBS Caused by Specific Foods?

- Refined sugars \(\rightarrow\) (sucrose, fructose, high fructose corn syrup, etc.) increase gas and bloating

I once combined all foods that were listed as the cause of IBS, and... the only food left you could eat was ____________

Therefore, you must be your own "Food Detective" \(\rightarrow\) There is NO magic IBS food list!

If an attack of IBS symptoms (cramps, urgency, diarrhea), then recall what they consumed in the past 12 to 24 hours...
IBS Differential Dx

- Appendicitis
- Diverticulitis
- Cholelithiasis
- Peptic Ulcer Disease
- Pancreatitis
- Crohn’s Disease
- Ulcerative Colitis

- Tumors or Polyps
- Pseudomembranous Colitis (C. Difficile)
- Yeast Infection
- Food Poisoning
- Hyperthyroidism
- Lactose Intolerance
- Gluten Intolerance (Celiac Disease)
Lactose Malabsorption

- History = often excess milk product ingestion
- Usually gives IBS symptoms
  - Abdominal bloating
  - Crampy pain
  - Diarrhea
- Etiology = bacterial digestion of lactose in cecum → excess hydrogen gas → hypertonic sugar solution → excess colonic secretions → IBS symptoms
- May try Lactose-free diet of Lactaid tablets
Celiac Disease (Sprue)

- Gluten intolerance – found in wheat, rye, and barley grains, and others
- Onset may occur in child or adult
- Autoimmune disorder → damage to the intestinal villi → malabsorption
- Cramps, bloating, diarrhea, constipation – just like IBS symptoms
- Dx → Antibody blood tests & S.B. biopsy

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Celiac Disease Treatment

- Lifelong gluten-free diet
- With strict gluten-free diet, over time, the small intestine will heal itself
- Patient must become very careful label reader for both foods and medications - to avoid any gluten
- I recommend sugar-free Metamucil, Citrucel, or Benefiber fiber supplements (all gluten-free)
Crohn’s Disease

- Crampy abdominal pain (partial obstruction)
- Rectal bleeding not common
- Often have vague RLQ pain/discomfort
- Usually no great change in bowel pattern, but **may** have diarrhea or constipation
- May present with unexplained anemia
- Crohn’s can be missed on colonoscopy if terminal ileum is not visualized
Chronic Ulcerative Colitis

- Crampy abdominal pain
- Diarrhea is very common
- Stool urgency is very common
- Nearly always *nocturnal* stools
- Rectal bleeding is almost universal
- May have weight loss and/or anemia
Staphylococcal Food Poisoning

- Caused by enterotoxin
- Careless food handling of milk products, meat, fish, others
- Usually lack of refrigeration
- Only 2 to 8 hour incubation period
- Then nausea, vomiting, and diarrhea
- Treatment is supportive
Salmonella Food Poisoning

- Eggs are common source
- Produces gastroenteritis, with nausea, vomiting, crampy pain and diarrhea
- Longer 12 to 24 hour incubation period
- Treatment is supportive

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E. coli Food Poisoning

- Bacterial enteritis due to overgrowth → enterotoxin production → crampy pain, diarrhea
- Undercooked beef is most common source – usually hamburger → E. coli Enterotoxin
- **24 to 72 hour incubation period**
- May be life-threatening in infants, children, and the elderly → dehydration, electrolyte imbalance
- Stool culture for E. coli subtype pathogen
- Treatment is generally supportive with fluids
- Prevention – **careful hand washing** and **well-cooked beef** – “Burn those Burgers” !!
Very, Very Important!!

RECTAL BLEEDING IS NEVER CAUSED

BY IRRITABLE BOWEL SYNDROME
Patient History for IBS

- Age at onset of symptoms?
- Duration of symptoms?
- Nocturnal stools? (Key Question)
- Rectal Bleeding? (Key Question)
- Diarrhea or constipation or both?
- Milk ingestion?
- Laxatives?
- New medications?
- Other family members ill?
IBS Patient Work-up

- Abdominal exam
- Anorectal Exam
- ? Stool cultures, ova and parasites, as indicated
- Endoscopy – Colonoscopy, EGD
- X-rays – UGI/SB, Barium Enema
- ? C.T. Scan, MRI Enterography
IBS Patient Work-up

- Must consider costs, insurance coverage → ? consider therapeutic trial before too many tests
- Full work-up may be very costly
- Diagnostic and treatment regimens must be based on good history and careful patient assessment
Treatment of IBS

- High fiber diet is essential...
  - Increases stool volume
  - Produces formed stools
  - Decreases frequency and amplitude of colonic contractions
  - Decreases colonic intraluminal pressures

- Patients often avoid fiber... often think of fiber as a laxative... need to be informed
Dietary Fiber 101

- Ingest what you cannot digest

- Fiber is hydrophilic (water loving)

- Works to prevent diarrhea by absorbing excess colonic fluid

- Works to prevent constipation by holding water in the colon
High Fiber Diets

- Usually psyllium seed based
  - Metamucil, Citrucel, others
- Citrucel is methyl cellulose
- I only recommend sugar-free fiber varieties
- Fiber One cereal – 14 grams fiber and zero sugar → eat as cereal, on salads, or mixed with low sugar yogurt, snack, etc.
Further IBS Treatment

- Depending on patient response to high fiber diet, may need to add medications such as Imodium to slow colon transit time

- First, assess compliance with high fiber diet supplements by careful history

- Patient may need more reassurance that we will achieve success

- You must tailor the specific treatment to the individual patient!
Treating the IBS Patient

- Patients are often very frustrated
- Their bowel is often running their life
- Often present with stool incontinence
- IBS patients need one-on-one counseling and education
- I plan on half hour visits for IBS patients, and hope for the best…

- After initial visit, I always do a one month follow-up visit
Dr. Surrell’s IBS Regimen

- Don’t make it complicated !!
- Must do patient high fiber diet education
- Sugar-free Metamucil – one heaping teaspoon every day – increase if needed
- Bedtime dose of 2 mg. Loperimide, may repeat in A.M. if still loose stools
- Patient reassurance and follow-up is essential
Loperimide (Imodium) for IBS

- Double-blind Swedish study
- Loperimide tablet vs. placebo
- Single nightly 2 mg. dose of Loperimide
- Significant relief of pain and urgency
- Improved stool consistency
Loperimide (Imodium)

- No abuse potential
- No CNS effects – works directly on bowel
- Long half-life (10.8 hours)
- Low cost, & tablets or liquid available
- I recommend crushed tablets
Loperimide (Imodium)

- Usually given as single nightly dose

- May use BID as needed

- Results are 75 % to 100 % effective…
  - Improved stool consistency
  - Less stool urgency
  - Decreased abdominal pain
Thank you very much...

IBS Questions ??