21st Century Gastroenterology: What’s real and what’s not

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Learning objectives

• Identify truisms and current knowledge regarding common gastroenterological (GI) disorders.
• Dispel misconceptions regarding said disorders.
• Integrate current standards of care, practice guidelines, available expertise, and patient preferences...

...in order to help provide evidence-based, patient-centered, clinical recommendations and interventions.
5 main topics

• Dysphagia
• Gastroesophageal reflux disease (GERD)
• Gastritis
• Gallstone disease
• Diverticular disease
Dysphagia
Dysphagia

What is real:

• Dysphagia refers very broadly to difficulty swallowing and can be of 2 main types:
  – Oropharyngeal (i.e. transfer) dysphagia
  – Esophageal dysphagia

• It is an alarm symptom that warrants evaluation to delineate cause and care.
  – Dysphagia can be a manifestation of malignant, paraneoplastic, neurologic, autoimmune, esophageal motility, inflammatory, or infectious disorder.
  – Initial workup (i.e. choice of tests) depends on suspected type of dysphagia, based on symptoms and clinical scenario.

Dysphagia

What is myth, incorrect, and/or obsolescent:

• Dysphagia is part of the aging process \( \times \)
  – False: a workup is indicated regardless of age (you want find that for which you don’t search).

• Barium esophagram is the gold standard \( \times \)
  – Not anymore: it is one of many tests to evaluate dysphagia.

• Dysphagia should be treated with PPI \( \times \)
  – Perhaps: in some cases, yes. If used empirically and all symptoms resolve, great; if not, continue workup.
    ▫ Note: PPI not indicated if dysphagia is oropharyngeal.

• My patient’s dysphagia is due to globus \( \times \)
  – Maybe: but globus is a diagnosis of exclusion.
Dysphagia

Practical pearls

• Approach workup based on the suspected type (oropharyngeal vs. esophageal) of dysphagia.

• Diagnostic options are numerous:
  – Video fluoroscopic swallow study, barium esophagram, upper endoscopy, esophageal manometry, CT chest, upper endoscopic ultrasound.

• In many cases, one modality is not sufficient.

• If in doubt, consult:
  – Speech Therapy, ENT, or Neurology for oropharyngeal dysphagia.
  – GI for esophageal dysphagia.
GERD
What is real:

• GERD develops when reflux of gastric contents causes symptoms or complications.
• Incidence and prevalence of GERD are rising
  – Now ≈50 million individuals in US (10-20%) have it.
• GERD/reflux-related disorders are 2nd leading GI diagnoses (530.11, 530.81) in outpatient visits.
• GERD associated with obesity, alcohol intake, smoking, age, and hiatal hernia.

GERD
What is myth, incorrect, and/or obsolescent:

• Patients with GERD need a PPI x
  – Sometimes: many patients do not. Choice of medication should be tailored to the frequency and severity of symptoms.

• All patients with GERD should have an upper endoscopy x
  – False: patients with typical and/or uncomplicated GERD do not need (up front) endoscopic evaluation.

• Esophagitis is the same thing as GERD x
  – No: GERD is a leading cause of esophagitis. Other notable causes are infectious (fungal, viral), eosinophilic, and caustic.

• “Barrett’s esophagitis” x
  – Misnomer: Barrett’s *esophagus*, also known as intestinal metaplasia of the esophagus. Only a fraction of GERD patients have Barrett’s, and many patients with Barrett’s have no symptoms.

GERD

Practical pearls

• Recognize that some patients have only mild or infrequent (<3x/week) symptoms
  – Try dietary changes and/or H2 blocker first.

• Other end of the spectrum are patients with “red flag” signs of complicated disease:
  – Dysphagia, unintentional weight loss, vomiting, hematemesis, risk factors for Barrett’s esophagus.
    ▫ White, male, obese, smoker, years of GERD symptoms.
  – In these patients, upper endoscopy is advisable.

• If GERD symptoms are not improving despite seemingly appropriate therapy, further workup may be needed.
Gastritis
Gastritis

What is real:

• Among GI disorders, 7th most common principal diagnosis from ED visits (600,000/year), 10th most common of outpatient visits (2 million/year).

• Most common causes are H. pylori infection and NSAID medications (e.g. ibuprofen, naproxen).
  – Other (contributing) factors/causes are smoking, alcohol, immune-mediated disorders (e.g. eosinophilic gastroenteritis, Crohn’s disease, autoimmune), viral infection, chemotherapy.

• “Stress” in and of itself not believed to cause clinically significant gastritis or ulcers.
  – However, it can synergize with the above factors/causes.

Gastritis
What is myth, incorrect, and/or obsolescent:

• The diagnosis of gastritis is made based on symptoms x
  – False: gastritis is a histopathologic diagnosis. Though a patient may have symptoms typical of gastritis, many mimics or secondary causes exist.
    ▫ Gastric cancer, duodenal ulcer, cholecystitis, pancreatic cancer, celiac disease, Crohn’s disease, lymphoma, gastroparesis, giardiasis, CVM, sarcoidosis.

• My patient needs upper endoscopy to rule out H. pylori infection x
  – Sometimes: H. pylori infection diagnosed by serology (least $), stool antigen (2nd least $), urea breath test, and upper endoscopy.
    ▫ The latter two are comparable in cost and amount of time needed.
    ▫ H. pylori serology should not be used in patients previously treated for H.p.

• PPIs are the treatment for gastritis x
  – It depends: should be based on the etiology of the process.
    ▫ H. pylori-related gastritis requires triple therapy (with antibiotic)
Though gastritis can be acute or chronic, chronic is more common, and is most often caused by *H. pylori*.

- In the absence of red flag signs, perform noninvasive tests to rule out *H. pylori* infection, and treat if positive.

In patients with “red flag”, upper endoscopy should be ordered to not only rule out *H. pylori*, but also other (and more sinister) processes.

- Some of these processes may not be detected (in early stages) on CT.

Most patients don’t need chronic PPI therapy for “gastritis” (as opposed to GERD).

- Consider tapering (to the lowest effective dose) or d/c PPI.
Gallstone disease

Gallstone disease

What is real:

• Gallstone disease is the 2\textsuperscript{nd} most common principal diagnosis from all GI, liver, and pancreas-related hospital admissions in the U.S.
  – Encompasses a broad variety of specific disorders
    ▫ Cholelithiasis, cholecystitis, choledocholithiasis, acute cholangitis.

• Acuity, severity, and nature of “gallstone disease” symptoms vary based on size and location of stone(s).
  – Also, gallstone disease symptoms may be indistinguishable from duodenal ulcer and other regional disorders.

• If cholecystectomy indicated, laparoscopic is preferable.

Gallstone disease
What is myth, incorrect, and/or obsolescent:

• We checked blood tests, patient has cholecystitis x
  – Misconception: cholecystitis is not a biochemical diagnosis.
    ▫ Typical RUQ pain + leukocytosis + imaging findings of GB wall thickening and pericholecystic fluid (+ Murphy’s sign).

• Liver function tests are up, patient has cholelithiasis x
  – Unlikely: Cholelithiasis usually does not have a significant impact on “liver function tests (LFTs)”.
    ▫ Serum liver tests affected when stone migrates into CBD or in Mirizzi syndrome.
    ▫ Liver enzymes (e.g. AST, ALT, ALP) are not “LFTs”.

• Gallstones on ultrasound are an indication for cholecystectomy x
  – False: asymptomatic, incidental stones better left undisturbed.
Gallstone disease

Practical pearls

• Though gastritis can be acute or chronic, chronic is more common, and is most often caused by *H. pylori*.
  – In the absence of red flag signs, perform noninvasive tests to rule out *H. pylori* infection, and treat if positive.

• In patients with “red flag”, upper endoscopy should be ordered to not only rule out *H. pylori*, but also other (and more sinister) processes.
  – Some of these processes may not be detected (in early stages) on CT.

• Most patients don’t need chronic PPI therapy for “gastritis” (as opposed to GERD).
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Diverticular disease
What is real:

• Diverticulum=outpouching of the wall of a hollow organ
  – From Latin “de-”, away from, & “vertere”, to turn
• Colonic diverticula are “pseudo”diverticula (M & SM only).
  – Typically 3-10 mm in diameter
  – Usually sigmoid portion of colon.
  – Increased prevalence with age
    ▫ < 10% of those <40 years
    ▫ > 50% of those >80 years
• ≈20% with diverticulosis will ultimately have sequelae.
  – Diverticular bleeding is the most common cause of overt lower GI bleeding in adults in the US.

Diverticular disease

What is myth, incorrect, and/or obsolescent:

• Can’t eat seeds, nuts, popcorn, etc. x
  – Misconception: these have not been associated with development or complications of diverticulosis.

• Patients with hematochezia have lower GI bleeding x
  – Maybe: hematochezia refers to a manifestation of bleeding, while “lower GI” refers to an anatomical source (i.e. two different categories/variables).
    ▫ Hematochezia can be from brisk upper GI bleeding, just as bleeding from a cecal diverticulum (lower GI) can manifest with melena.

• Diverticular bleeding usually stops on its own, thus my patient does not need colonoscopy x
  – Perhaps: but how about the 25% who don’t stop bleeding (usually don’t know real-time who will vs. won’t stop bleeding).
    ▫ How about if someone has diverticulosis as well as colon cancer?
Diverticular disease

Practical pearls

• Asymptomatic diverticulosis can be left alone.
  – In patients with diverticulosis who are also constipated, reasonable to recommend high fiber, low red meat, low fat diet and increasing physical activity.

• Diverticular disease includes diverticular bleeding and acute diverticulitis.
  – These are very different disorders, and both can be associated with significant morbidity.
    ▫ Patients with acute diverticulitis should undergo colonoscopy 6-8 weeks after the episode if no colonoscopy in preceding 2 years.

• Patients who have complicated bouts of either form of diverticular disease may benefit from surgical resection.

Peery AF et al. Gastroenterology. 2012 Feb;142(2):266-72
Summary

• We have discussed truisms and current knowledge as well as myths and misconceptions regarding 5 common GI disorders.
  – Dysphagia
  – GERD
  – Gastritis
  – Gallstone disease
  – Diverticular disease

• The topics discussed today, together with current clinical practice guidelines, provide a helpful framework.
  – Integration with available expertise and patient preferences is essential for patient-centered care and optimal outcomes.
Questions?

Thank You