GI Pearls and...
Diagnostic Errors

David A. Johnson MD MACG FASGE FACP
Professor of Medicine
Chief of Gastroenterology
Eastern VA Medical School
Norfolk VA
Disclosures

• Editor: NEJM J Watch Gastro (esophageal)
• Consultant: Pfizer, Aries, CRH Medical

: WebMD/MedScape (Gastro)
Helicobacter pylori testing

- 34 year old Hispanic  epigastric pain 2 weeks
  - worse with eating
  - melena for the last 24 hrs
- Emergent upper endoscopy: 1 cm prepyloric ulcer
  - active bleed which is controlled by endoscopic therapy
  - antral biopsies: Helicobacter pylori
- PPI, clarithromycin, amoxicillin, metronidazole x 14 d
  - 8 week PPI
- Seen back in the office 10 weeks off all meds
- You recommend:
A  H pylori serology (IgG)
B  H pylori serology (IgA)
C  Repeat endoscopy with biopsy
D  Stool for HP antigen
E  No further test- observation for recurrence
H. Pylori testing

- Appropriate testing document eradication
  - stool antigen for H. pylori
  - urea breath test
  - biopsy (only if endoscopy to be repeated)
- Repeat testing >4 weeks post completion Rx
- PPIs may affect sensitivity/specificity of non-serologic testing
  - hold PPI at least 1 week
H pylori Treatment

• Most patients will be better served first line Tx:
  - bismuth quadruple therapy or
  - concomitant therapy consisting of

PPI, clarithromycin, amoxicillin, metronidazole
Next Test

A  H pylori serology (IgG)
B  H pylori serology (IgA)
C  Repeat endoscopy with biopsy
D  Stool for HP antigen
E  No further test- observation for recurrence
H. Pylori - Pearls

• 14 day treatment duration
• New treatments-quadruple based tx
• All treated patients- document eradication
• Serology testing not for eradication f/u
CRC Screening
Fecal Blood Testing

• 52 yr old Caucasian male seen annual physical exam
• Initial screening colonoscopy (age 50)
  -mild diverticulosis and hemorrhoids
  -GI colonoscopist recommended repeat 10 yrs
• He reports his father recently diagnosed CRC age 86
• What test would you recommend for CRC screening?
Next Test

A  Hemoccult testing x 3 (FOBT)
B  Fecal immunohistochemical test x 1 (FIT)
C  Fecal DNA (Cologuard)
D  No test at present
   - repeat colonoscopy 10 yrs after first exam
E  EpiproColon (Septin 9 serum assay)
CRC Screening

• After high quality screening colonoscopy
  - no alternative screening if colonoscopy to be repeated
• FOBT no longer recommended (replaced by FIT)
  - Improves sensitivity/specificity
  - Any + FIT warrants colonoscopy

Am J Gastroenterol 2017; Jul;112(7):1016-1030
Next Test

A  Hemoccult testing x 3 (FOBT)
B  Fecal immunohistochemical test x1 (FIT)
C  Fecal DNA (Cologuard)
D  No test at present
   - repeat colonoscopy 10 yrs after first exam
E  EpiproColon (Septin 9 serum assay)
CRC Screening Pearls

- FIT replaces FOBT
- No interval screen testing if 10 yr colonoscopy
- Family hx CRC >60
  - First degree relative begin at 40 then q 10
- Age to stop
  - USPTF 85 yr
  - MSTF- consider comorbidities (life <10 yrs)
Abdominal Pain Evaluation

- 24-year-old Caucasian woman RUQ pain
  - dull ache with intermittent stabbing severe pains
  - improved with recumbence
  - intermittent nocturnal awakening (rolled her right side)
  - no change with meals/ associated relief with BM
  - no radicular pain
Abdominal Pain Evaluation

• Onset:
  - backpacking hiking vacation trip to Europe
  - swinging backpack/carrying infant extended hiking

• Return home month ago but since
  - experienced it on two separate occasions
  - severe enough that she went to the emergency room
  - normal CAT/labs x2

• PE: point tender RUQ over gallbladder area
  - more tender flexes abdominal muscles/raises off bed
  - no rebound/normal BS/no rashes
Next Test

A  CCK Hida (evaluation ejection fraction)
B  MRCP
C  ERCP
D  Referral for upper endoscopy
E  Local heat/analgesics
Abdominal Pain Evaluation

- Good history/classic physical finding
  - abdominal wall pain
- Carnett’s sign
  - patient supine/ find exact point maximally tender
  - fold arms flex up
  - examiner kept fingers point of max tenderness
- Carnett’s hypothesis
- Savings average $900 per case /avoidance testing
Next Test

A  CCK Hida (evaluation ejection fraction)
B  MRCP
C  ERCP
D  Referral for upper endoscopy
E  Local heat/analgesics
Abdominal Pain – Carnett’s Pearls

• Local heat/NSAIDs/topical analgesics
• Look for causes
  - habitus/posture
  - take good history
  - look at back/posture/shoulders/pelvis tilt
Clostridium difficile Testing

- 75 yr old female, acute diarrheal illness
- Recent tx amoxacillin for URI
- No prior history of diarrheal disease
- C difficile + glutamate dehydrogenase (GDH)
  - Rx flagyl 500 mg tid for 10 days
- Seen your office 2 weeks post treatment
  - resolution diarrhea now normal BM

What is best recommendation for next test?
Next Test

A  C. difficile glutamate dehydrogenase (GDH)
B  CDI Nucleic Acid Amplification Gene Testing
C  EIA detection toxin A+B toxin
D  No CDI test at present
E  Immune deficiency evaluation
Clostridium difficile Testing

• 50% responded to treatment
  - asymptomatically can shed *C difficile* spores 6 weeks

• After successful treatment
  - stool assays often remain + for months
  - indicating ongoing colonization w/o clinical disease

JAMA Intern Med 2015 ;175(11): 1746-1747
Clin Infect Dis. 2018; doi: 10.1093/cid/cix1085
Clostridium difficile Testing

- Repeated demonstration stool + by laboratory assays
  - repeated stool test of cure **not recommended**
  - even more so patients **not have ongoing diarrhea**

JAMA Intern Med 2015;175(11): 1746-1747
Clin Infect Dis. 2018; doi: 10.1093/cid/cix1085
Next Test

A  C. difficile glutamate dehydrogenase (GDH)
B  CDI Nucleic Acid Amplification Gene Testing
C  EIA detection toxin A+B toxin
D  No CDI test at present
E  Immune deficiency evaluation
C diff. Pearls

• No test if not diarrhea
• “Toilet hygiene” discussion
• Prophylaxis for high risk patients
• FMT treatment option
  - high risk
  - recurrence
Be Thoughtful and.. Careful with Change