GI for GPs Course 2014

Case Workshop #1: Fatty Liver

Case Scenario:

- Edna B. is a 47 year old, stay-at-home mother of three.
- During her annual checkup, she mentioned intermittent right upper quadrant pain.
- This led to an ultrasound suggesting fatty liver.
- On further questioning, she shares a bottle of red wine with her husband 2-3 days per week and occasionally on the weekend.
- Her bowel habits are irregular and she has a tendency towards constipation.
- Edna admits she has always been a bit heavy since her first baby.

- What to do?

Teaching points:

1. Is the pain from fatty liver?
   - A. No. Probably irritable bowel

2. Is this enough wine to cause fatty liver?
   - A. 5 ounces of wine is the standard 1 drink. This contains 14 grams of alcohol.
   - A bottle of wine contains 25 ounces or 70 grams. Four 1/2 bottles contain 140 grams. Greater than 140 grams of alcohol per day over 2 years may be the source of fatty liver. The wine has calories too. (But life is short!)

3. Would any other tests be of interest?
   - A. Tests for Diabetes, and Dyslipidemia are mandatory. Obtain a ferritin.
   - Other causes of fatty liver include hepatitis C, medications, TPN, weight loss/starvation and a few others that would rarely be found in outpatients e.g. fatty liver of pregnancy, Wilsons disease etc.

4. Do you need a liver biopsy?
   - A. No. Lab tests +/- Fibroscan should be fine in most cases.
   - B. Liver biopsy to be considered if: diagnosis unclear, determine relative contribution of different diagnoses, determine degree of fibrosis

5. Are weight loss and exercise sufficient therapy?
   - A. In most cases.
     - Treat diabetes and cholesterol. Do not avoid statins unless LE > 3xULN
     - Bariatric surgery for the morbid obese
     - Vitamin E is controversial: in non-diabetics with no history of CAD, 400IU twice a day can improve fibrosis and steatosis

- Pioglitazone: too many side effects i.e. CHF, peripheral edema. Improvement of LE disappears with discontinuation of therapy
- Statins: no role unless treating dyslipidemia (treating elevated CV risk)
- Metformin: can use if diabetic or pre-diabetic
- Betdeoxycholic acid is on the way.

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Case Workshop #2: Dysphagia

Case Scenario:

- Mabel is a 78-year-old woman with complaints of swallowing difficulties.
- She has asymptomatic coronary heart disease (picked up on ECG), osteoarthritis and osteoporosis, psoriasis of the skin requiring no therapy.
- There is occasional bloating and constipation.
- She rarely drinks alcohol, smokes 10-12 cigarettes every day and has since she was 15 years old.
- Diabetes was once considered but there appears to be no evidence for this diagnosis on the last two HbA1c blood tests.
- She has had hysterectomy, appendectomy, cholecystectomy and an inguinal hernia repair.
- She may be allergic to morphine as she had a funny reaction years ago at her last surgery.
- The dysphagia is intermittent, usually for solids but can be for fluids as well. It's been off and on for at least 2 years. It may be a bit worse the last few months. but there has been no trouble the past 3 weeks.
- In the morning, the big calcium pills may be a bit difficult to swallow without a lot of coffee.
- She had heartburn for a few days last year but stopped eating avocados and it was better in days.
- Once in a while she gets a bit of chest pain.

- What to do?

Medications

- Tylenol pm
- An occasional over the counter Advil for the arthritis
- 2 Centrum for Seniors,
- 2 Calcium with vitamin D
- An uncertain pill she takes every Monday for her bones,
- Senekot 2 at bed for constipation

Teaching points:

1. Do you arrange a swallowing study?
   - A) This seems to me to be a typical history. There may be no easy
   - You could pick up oropharyngeal dysmotility on VFSS.

2. Do you try PPI's before tests?
   - A) She is a smoker using occasional NSAIDS and maybe a bisphosphonate.
   - The problem sounds benign perhaps medication before investigation is not a bad idea.

3. Is there a role for a barium study?
   - A) With limited endoscopy times there may be a role for barium and PPIs as a first try.

4. Do you organize a gastroscopy and dilation as the first step?
   - A) It might be practical getting ulcerative and erosive disease, strictures/rings and eosinophilic esophagitis out-of-the-way. You might then pass a dilator. It helps at times.

5. Do you arrange an esophageal motility study?
   - A) Motility needed to be conclusive in a motor disorder but would a trial of meds go first?

6. Is there a role for amitryptline/ calcium channel blockers?
   - A)

7. Is there a role for once in a lifetime gastroscopy for GERD?
   - A) Screening currently not recommended in any guidelines. May consider individualizing based on risk factors (male, Caucasian, obese, etc)

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Case Workshop #3: Colonoscopy

Case Scenario #1:

Sara is a 19 year old first year nursing student. She visited her family physician with the concern of constipation. The FIT test was done and was positive. Sara knows from her ward experience that this positive test suggests polyps and cancer. She is very anxious. Is colonoscopy indicated?

Case Scenario #2:

The attending physician at the "Great Place to End Up" nursing home ordered a FIT test on many residents (16!). Many families are now concerned their loved ones have a colon cancer. Should there be a discount rate for group referrals?

Case Scenario #3:

Miriam is a 77 year old snow bird, loving Phoenix every winter. Her golf handicap is 20. She enjoys the sun and an occasional glass of red wine. As part of her Edmonton living schedule she has a regular medical checkup. This time she was found to be FIT positive. The SCOPE program has declared she is too old for screening colonoscopy. Should she have a colonoscopy?

Case Scenario #4:

Mary X is a 57 year old who complains of abdominal pain after meals. Plain films of the abdomen suggested the possibility of a subtle obstruction in the colon. A FIT test was positive. Mary is extremely anxious and despite being prepped for colonoscopy and keeping the colonoscopy appointment, she adamantly refused to sign the consent form. The endoscopist sent her back to her family physician. What do you do? Are there alternatives to colonoscopy?

Case Scenario #5:

Susy is a 25 year old with a presentation in keeping with ulcerative colitis. In your office, you are discussing the importance of confirming the diagnosis with endoscopy. Risks and benefits are talked about. Susy mentions that she has Googled the topic and knows that at endoscopy is associated with procedural and sedative risk. How do you discuss this with her or do you tell her the endoscopist will tell her all (and they might tell her the anesthetist will tell all!) ?

Case Scenario #6:

44 year old northern Alberta women who has been constipated for 20 years believes her symptoms are due to a 'bowel blockage' and she googled "causes of bowel blockage" and now wishes for a colonoscopy.

Case Scenario #7:

Harry is a 55 year old with FHx of CRC (brother at 40s) who presents with change of bowel habits and intermittent rectal bleeding. Amazingly the FIT is negative. Does he need a colonoscopy? Should he have had a FIT test to begin with?

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Case Workshop #4: Iron Deficiency Anemia

Case Scenario:

- A 48 year old woman is found to have a microcytic anemia on routine blood work.
- She has been fatigued recently, but attributed this to stress at work.
- Her hemoglobin is 103 g/L, MCV 72, ferritin 5.

Teaching points:

6. What is your differential diagnosis?
   - Blood loss: GI vs GU, blood donation
   - GI symptoms? menorrhagia? NSAIDs?
   - Poor intake: vegetarian etc.
   - Malabsorption: celiac/Crohn's
   - Hematologic disorders: compare to previous labs (ethnicity/thalassemia)

7. Would you order any additional bloodwork?
   - Peripheral smear, reticulocyte count
   - anti-TTG +/- IgA

8. Would you order a FIT test?
   - NO. This is not a screening situation. FIT is not going to change your management here, and a positive FIT would not triage this patient any differently.
   - On further history, she has a history of GERD and takes pantoprazole once daily with good control of symptoms. She denies the use of OTC medications. She denies dysphagia, abdominal pain, weight loss, change in bowel motions or melena/hematochezia. There is no family history of GI disorder. Her last CBC a year ago was normal.

9. What is your next step?
   - Assuming celiac serology is negative, this patient should be referred for colonoscopy.
   - Could discuss role of radiologic investigations:
   - barium UGI series/SBFT/Ba enema: sensitivity too low to be useful in this situation
   - CTC: won't examine mucosa for non-neoplastic causes of iron deficiency.
   - Should patient have gastroscopy too?
   - this is debatable. No upper GI symptoms, on PPI already, not on NSAIDs. Could decide to do it sequentially if colonoscopy is negative, but from a practicality/weight list point of view many people would book both at the same time.

10. Could her PPI be the cause of her anemia?
    - Theoretical risk of iron deficiency on PPI due to achlorhydria, but long term studies (7 years duration) have not identified clinical iron deficiency anemia, and not often seen in clinical practice
    - Also theoretical risks of calcium, magnesium, Vitamin B12 malabsorption
    - Vitamin B12: mixed data all from retrospective reports. If there is an increased risk, the absolute risk is small, and in theory the problem would be related to acid-induced release of B12 from food, so patient should still respond to an oral B12 supplement
    - Magnesium: Rare case reports of idiosyncratic severe hypomagnesemia have resulted in an FDA black box warning for PPIs and hypomagnesemia. Mechanism unknown.

11. If a colonoscopy is normal, what should be considered next?
    - Now could consider gastroscopy
    - Discuss options for small bowel imaging (SBFT/CTE/MRE/Capsule)

12. What is the role of oral vs parenteral iron supplementation?
    - Even for patients with malabsorption (e.g. Crohn's) IV and PO are equally effective. Main issue is adverse effects with oral iron
    - Need hospital privileges to order parenteral iron infusion
    - Other points to consider with oral iron: Adverse effects (constipation) and costs (ferremax costs about 10Xs as much as cheapest alternative). Elderly with iron deficiency do well with Fer-in-sol 5% 2.5 ml od or bid when compared to regular adult iron.

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Case Workshop #5: Gastroscopy

Case Scenario:

1) **Would you gastroscope every patient with dysphagia or odynophagia?**

2) **Would you gastroscope every patient with nausea and vomiting?**

3) **Would you gastroscope every patient with dyspepsia?**

4) **Would you gastroscope every patient with dyspepsia to test for Helicobacter pylori?**

5) **Would you gastroscope every patient with iron deficiency?**

6) **Would you gastroscope every patient with heartburn?**

7) **How often does someone with Barrett's esophagus need to be gastroscoped? Every year? Every 2 years?**

8) **If you think the patient has an ulcer should you have them gastroscoped?**

9) **Would you gastroscope every new patient with celiac disease?**

10) **Would you gastroscope every patient with cirrhosis even if they were asymptomatic?**

Teaching points:

1) **Would you gastroscope every patient with dysphagia or odynophagia?**
   - Oropharyngeal origin: get swallowing studies.
   - Esophageal origin gastroscope.
   - Remember to start PPI and for odynophagia inspect mouth for thrush

2) **Would you gastroscope every patient with nausea and vomiting?**
   - In a patient with nausea vomiting persisting for more than 48 hours without intestinal occlusion and thought to be of gastroduodenal because endoscopy is preferred Hematemesis, NSAIDS

3) **Would you gastroscope every patient with dyspepsia?**
   - Patients greater than 45 years with or without alarm symptoms.
   - If on NSAIDS I often scope them too.
   - Also if of Asian descent or from an area with high endemic rates of gastric cancer - NWT for Canada

4) **Would you gastroscope every patient with dyspepsia to test for Helicobacter pylori?**
   - With symptoms and treatment failure or recurrence of symptoms after presumed successful therapy.
   - Would likely depend on age of patient? Or endoscopist
   - The peds guidelines I think suggest scoping all first.

5) **Would you gastroscope every patient with iron deficiency?**
   - Gastroscopy is recommended in iron deficiency anemia after non-gastrointestinal origins have been eliminated.
   - It is the first choice when there is a suggestion the upper guestroom gastro intestinal tract may be the cause.
   - It should be done after inconclusive colonoscopy preferably at the same anesthesia.

6) **Would you gastroscope every patient with heartburn?**
   - Gastroscopy is indicated in patients over 50 with new onset reflux or anyone with reflux and alarm symptoms such as dysphagia, bleeding or weight-loss. Investigations of symptoms associated with reflux may require endoscopy after initial assessment. These problems include recurrent cough, pain, hoarseness, ear pain.
   - Note: Once in lifetime gastroscopy will come up: agree or not (or depends). If symptoms well controlled on PPI --> still scope...? They are likely to ask about PPI failure as indication for scope.

7) **How often does someone with Barrett's esophagus need to be gastroscoped? Every year? Every 2 years?**
   - The Canadian guidelines are being written.
   - For now short segment Barrett's every 3-5 years. Long segment- greater than 3 cm of Barrett's- every 2-3 years.
   - Finding dysplasia shortens the time interval and management.
   - Would think that for upcoming the guidelines are in constant flux and I would leave it as 3-5 years unless dysplasia.

- Unless develop ALARM sx in interim guidelines dysplasia would be trigger point to continued surveillance vs more lax....but will wait and see.

8) If you think the patient has an ulcer should you have them gastroscoped?

- A) Yes. If > 45 years – everybody. If<45 yr. - clinical judgement -treat or test. Yes (I SCOPE everyone with ulcer)
- Repeat the gastroscopy in gastric ulcer cases
    - 1) if the patient is older than 35 years,
    - 2) symptoms persist despite therapy
    - 3) the gastric ulcer biopsies were uncertain,
    - 4) the gastric ulcer looked unusual

9) Would you gastroscope every new patient with celiac disease?

- Probably a good idea to confirm the diagnosis as the management is lifelong. There is a move afoot to biopsy again when “well" to show mucosal healing. Yes, this will come up: elevated ATTG --> just 'call it celiac and start with GFD'. Also comes in handy when they don’t get better despite GFD to have baseline Bx

10) Would you gastroscope every patient with cirrhosis even if they were asymptomatic?

- Yes. Surveillance for varices is important at the time of diagnosis and then as necessary but at least every two years.

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Case Workshop #6: Cirrhosis

Case Scenario:

- The 57-year-old man presents in your office for an insurance examination. He has no complaints.
- Your physical exam is unremarkable.
- Lab testing reveals: CBC normal, Bilirubin 22 (N=<20) AST 56, ALT 46, alkaline phosphatase 197.
- You arrange an ultrasound. It suggests an irregular liver contour, slightly enlarged spleen and no ascites.

- What do you do? Refer or investigate?

Teaching points:

1. You have decided to investigate and measure hepatitis C antibody. It is positive. Does he have hepatitis C?
   - A. Not certain. 25% chance not hep C. 75% chance it's HepC. Need CRNA.

2. You measure a serum ferritin. The result is 759. Does he have Hemochromatosis?
   - A. Good review of etiology of cirrhosis / abnormal LFTs. could be, but in cirrhosis should be higher. Remember ferritin goes up with inflammation.

3. If you decide to investigate will you sent him for a liver biopsy? Yes or No
   - A. Liver biopsies rarely done these days. Fibroscans

4. You tell him to stop all alcohol but he does not drink. He smokes a package of cigarettes most days. Are they a factor in cirrhosis?
   - A-Yes. Perhaps as important as alcohol once you have cirrhosis.

5. Serum Cholesterol, LDL and HDL are normal. He read on line that a statin might help. Would you prescribe one?
   - A. Yes. May change progression of cirrhosis.