EVIDENCE-BASED APPROACHES: IMC Case on GERD

Mr. Hart Burns is a 45 year old man who presents to the IMC with the chief complaint of heartburn. He has experienced retrosternal burning discomfort on and off for the last 5 years. It is usually worse after large meals and when he lies down for bed. Occasionally he will burp up a bitter tasting fluid into his mouth. The symptoms started shortly after he sprained his knee and stopped exercising, subsequently gaining 30 pounds in weight. He has been self-treating at home with Tums and over the counter famotidine as needed, but the symptoms have become more frequent and sometimes the medications are of limited benefit. He denies any difficulty or pain with swallowing, nausea or vomiting, black or tarry stools, weight loss, or fatigue. He denies any other abdominal pain. He states he was seen at ER three months ago for the retrosternal burning. They gave him an aspirin and did an exercise stress test, which was normal. He was told to follow-up at the IMC, and that is why he presents today.

Past Medical Hx: Hypertension, Left knee sprain
Past Surgical Hx: None
Allergies: Penicillin (rash)
Medications: Enalapril 20 mg daily
Family History: Mother and Father alive, both with hypertension; no family history of cancer, IBD, or celiac disease
Social History: Former tobacco user, 1 ppd for 10 years, quit 10 years ago; occasionally drinks 1 to 2 beers on weekend when watching games; denies illicit drugs; lives with wife in home, monogamous heterosexual; works as a landscaper/snow removal laborer

Vitals: Temp: 98.4; BP: 126/84; Pulse: 80; RR: 14; Ht: 72 inch; Wt: 235lbs; BMI: 31.9
General: AO x 3, NAD, nontoxic, obese
HEENT: PERRL, EOMI, TM's pearly gray bilateral, turbinates pink and moist, oral mucosa moist, good dentition, posterior pharynx within normal limits
Neck: Supple, no JVD, no lymphadenopathy
CV: RRR, no murmurs, gallops, or rubs
Lungs: BCTA, no wheeze, rhonchi or rale
Abdomen: Soft, + BS, NT/ND, no mass, hernia or organomegaly, no Murphy's sign, no flank tenderness to palpation
Rectal: Normal sphincter tone, no mass, smooth prostate, hemoccult negative
Neuro: Grossly intact
Skin: No lesions or rashes

Record Review: ER visit 3 months ago, revealed normal CBC, CMP, troponin. Exercise stress test with 15 METS, no EKG changes at 90% predicted maximal heart rate "normal stress test" per report

Please utilize the 2013 GERD Practice Guidelines to answer the following questions
https://journals.lww.com/ajg/Fulltext/2013/03000/Guidelines_for_the_Diagnosis_and_Management_of.6.aspx

1. What is the most likely diagnosis for our patient? (pg. 308)

2. What is the definition of gastroesophageal reflux disease? (pg. 308)

    a. Is tissue injury necessary to fulfill disease criteria?

3. What percentage of US adults report some symptoms of reflux disease? (pg. 308)

4. What is the first step if GERD presents as chest pain? (pg. 308)

Mr. Hart Burns requests a referral to gastroenterology for an upper endoscopy. Answer the following questions to see if you want to send him to GI now.

5. How do you make a diagnosis of GERD? (See Table 2, pg. 312)

6. What is the sensitivity and specificity of a PPI trial in the setting of typical GERD symptoms? (pg. 311)

7. Do you screen for H. pylori infection in patients with GERD? (pg. 311)

8. When is it reasonable to screen for Barrett's esophagus? (pg. 312/324)

9. What are the alarm symptoms that push clinicians to refer for early EGD?

10. What lifestyle changes should be recommended to every patient with GERD? (pg. 314)

11. What pharmacological therapy options are available to patients failing lifestyle recommendations? (pg. 314)

    a. What would you recommend to Mr. Burns and why?
    b. How should he take his medication?

You let Mr. Burns know that a referral to gastroenterology and endoscopy is not necessary at this time. You start him on pantoprazole 40 mg daily and ask him to follow up in 4 weeks. He returns and states the heartburn symptoms are improved, but still not gone. Please answer the following questions to help Mr. Burns.

12. If once daily PPI therapy is unsuccessful in a patient with typical GERD symptoms, what is the next step?

13. True or False. Any PPI (dexlansoprazole, esomeprazole, lansoprazole, omeprazole, pantoprazole, or rabeprazole) may be used because absolute differences in efficacy for symptom control and tissue healing are small.

14. Is there any utility in switching Mr. Burns to a different PPI?

You increase Mr. Burns pantoprazole to 40 mg twice daily, he returns 8 weeks later and states he is continuing to have breakthrough burning pain retrosternally.

15. How many patients do not achieve remission of symptoms with PPI therapy? (pg. 321)

16. Is GI referral and further investigation with an upper endoscopy now warranted for Mr. Burns?

You refer Mr. Burns to your local GI physician for an endoscopy. He is found to have erosive esophagitis.

17. What are the complications associated with GERD? (pg. 323)

18. When should maintenance PPI therapy be started/continued? (pg. 314/323)

19. When can other GERD medications (TUMS/H2 blockers) be utilized? (pg. 313-314)

20. Review the below and explain how to counsel Mr. Burns on adverse events of PPI's. (pg. 318)
    a. Vitamin B 12 deficiency
    b. Iron deficiency anemia
    c. GI infections (what types are most common?)
    d. CAP
    e. Hip fractures
    f. Cardiovascular events in the setting of clopidogrel use

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