

- a. Describe your assigned client's situation. Why are they presenting to the clinic? What medications are they currently taking?

The patient coming in today is Alessa DiGiovanni, she is a 42-year-old female who is presenting with epigastric discomfort and nausea for the past two months. This pain is relieved by eating but always returns, she has tried modifying her diet, taking antacids, and Pepto-Bismol. She currently takes no medication and has a past medical history of anemia. She does not have any allergies. She also smokes a pack of cigarettes daily and drinks on the weekends.

- b. Assess the applicable clinical practice guideline (CPG) for your assigned client linked on the same page in the lesson where the client case is located. What treatment is recommended by the CPG for your client's situation?

The Clinical Practice Guidelines (CPG) starts by discussing the diagnosis of peptic ulcer disease (PUD) and H. Pylori. It is diagnosed with a urea breath test, stool monoclonal antigen test, serologic test, and endoscopy. In an article by Said & El-Nasser (2024), a urea breath test is the gold standard of non-invasive test to diagnose H. Pylori. The CPG continues to the treatment options, there are two set ways to treat H. Pylori. The CPG states for their first-line therapy, "seven to 10-day triple-drug regimen consisting of PPI, amoxicillin 1g, and clarithromycin 500mg twice daily" (Fashner et al, 2015). The second line consists of non-bismuth bases quadruple therapy which is Proton pump inhibitor (PPI), amoxicillin, clarithromycin, tinidazole or metronidazole twice daily. The second therapy is used when the first one fails.

- c. Discuss your personal professional assessment of the client's situation provided in the scenario. What pharmacological treatment is necessary and why?

Assessing Alessa's situation and comparing it to the Clinical Practice guidelines, treatment should be started with the first line that is recommended. Alessa should be started on a PPI, amoxicillin, and clarithromycin because this is a new diagnosis for her and according to the CPG the eradication rate is 70-85% success rate (Fashner et al, 2015). Another reason is that Alessa had tried Pepto-Bismol, a bismuth therapy that could be considered part of the second line of treatment as a second option. The Pepto-Bismol was not effective but was only given alone, so this could be trialed again with antibiotics if the first does not work. It is recommended to start with the first line and then move on to the second when the first is ineffective. Along with the antibiotics, omeprazole or pantoprazole should be started as a first-line PPI.

- d. Reflect on additional questions you have about your assigned client that may influence treatment. What else do you need to know? What follow-up assessments, labs, or conversations are required to ensure optimal health outcomes?

With starting Alessa on the first-line treatment, deciding which PPI is best for her should be discussed. According to an article by Wang et al (2024), PPI can induce liver injury (rarely), and omeprazole had the highest number associated. With Alessa drinking