

Title: Assessing the Need for GI Prophylaxis with DAPT and Triple Therapy

Presenter:

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Learning Objectives:

1. Describe the mechanisms of action of aspirin, P2Y₁₂ inhibitors, and DOACs and how these may increase the need for PPIs and H₂RAs
2. Identify the risk of GI bleeding with various combinations of P2Y₁₂ inhibitors, antiplatelets, and/or anticoagulants along with assessing the risks and benefits of GI prophylaxis
3. Discuss the findings from literature evaluating GI prophylaxis with the combination therapies

Abstract:

Antiplatelet agents (i.e., aspirin and P2Y₁₂ inhibitors) and anticoagulants (i.e., direct oral anticoagulants) can increase a patient's risk for bleeding. When used in combination, the patient is at even greater risk for a bleeding event to occur. Among ACS, PCI and CABG patient populations, gastrointestinal bleeding is the most common source, while bleeding from sources other than gastrointestinal are common among the ischemic stroke population.

Due to the increased risk for gastrointestinal bleeding, agents such as proton pump inhibitors (PPIs) and histamine 2 receptor antagonists (H₂RAs) have been concomitantly prescribed for GI prophylaxis. However, these agents are not completely harmless and can cause their own adverse effects. Deciphering which patients truly need GI prophylaxis with the use of these agents is not straightforward, and guideline recommendations differ. The European Society of Cardiology recommends use of PPI with DAPT, while the American College of Cardiology/American Heart Association guidelines include more specific indications for when a PPI should be used with DAPT including those with a history of GI bleed or patients at increased risk for bleeding. They go on to state that a PPI is not indicated with DAPT when a patient is at low risk for GI bleeding.

This presentation will discuss combinations of antiplatelets and anticoagulants including dual antiplatelet and triple therapies. Adverse effects, primarily GI bleeding, will be evaluated. Based on the findings from literature and guidelines, recommendations will be provided for when and in which patient populations GI prophylaxis should be considered.

Audience Response Questions:

1. How do the GI prophylactic agents discussed promote protection against GI bleeding?
 - a. PPIs; Decrease gastric acid secretion
 - b. H₂RAs; Decrease gastric acid secretion
 - c. PPIs; Prevent gastric acid secretion

- d. H2RAs; Prevent gastric acid secretion
2. Which of the following are true statements regarding DAPT and triple therapy? Select all that apply.
 - a. Clopidogrel is the preferred P2Y12 inhibitor when used in combination therapies
 - b. GI prophylaxis is recommended in ALL patients with DAPT or triple therapy
 - c. DAPT has higher risk of bleeding compared to triple therapy
 - d. Agents should be utilized for the least amount of time possible to prevent adverse outcomes
3. Each of patients below is undergoing PCI and will be placed on DAPT afterwards. Which of these patients would likely benefit from GI prophylaxis? Select all that apply.
 - a. A 90 y/o male with hypertension and type 2 diabetes
 - b. A 70 y/o male with history of AF currently on apixaban
 - c. A 45 y/o female with asthma
 - d. A 65 y/o female on prednisone 30mg daily for rheumatoid arthritis

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