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BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 38. No. 9

ANTITHROMBOTICS

There's still debate about how to limit GI bleeding risk in patients taking antithrombotics (aspirin, *Eliquis,* warfarin, etc).

We know that these meds increase GI bleeding risk...especially if more than 1 is needed, such as for patients with atrial fib plus a recent coronary stent. But PPIs also have risks (C. *diff,* etc).

In general, suggest gastroprotection for patients on an antithrombotic with a prior GI bleed...those who also need a chronic steroid or NSAID...or if 2 or more antithrombotics are necessary.

But consider caveats. For example, gastroprotection may not be needed with a low-dose steroid...or if the GI bleed was years ago.

Recommend any standard-dose PPI (pantoprazole 40 mg/day, etc).

Keep in mind, patients on clopidogrel can take esomeprazole or omeprazole. Alerts and labels say these PPIs reduce active clopidogrel levels...but data suggest the interaction doesn't increase CV events.

If PPI side effects are a concern, consider an H2-blocker (famotidine, etc) instead...but these are less effective.

Don't recommend a PPI plus an H2-blocker...there's no evidence this decreases antithrombotic bleeding more than the PPI.

Advise tapering off gastroprotection once it's no longer needed.

For instance, dual antiplatelet therapy is often used for 6 months or less after a coronary stent. Note in the patient's profile to consider stopping the PPI after backing down to 1 antiplatelet.

Also consider other ways to limit GI bleeding risk.

Reevaluate the antithrombotic choice. For example, *Eliquis* (apixaban) seems to cause less GI bleeding than other direct oral anticoagulants...and may be preferred with a history of a GI bleed.
Ensure patients are on the appropriate antithrombotic dose...and check for drug interactions.

Evaluate if antithrombotics can be deprescribed. For example, many patients on aspirin for primary CV prevention may not need it.

And caution to limit meds or supplements that may increase bleeding...NSAIDs, fish oil, ginkgo, etc.

Review our resource, *Proton Pump Inhibitors: Appropriate Use and Safety Concerns,* for more on long-term risks, interactions, etc.

Note: This article was revised to reflect product availability. A version of this article appeared in the September 2022 print issue of Pharmacist's Letter.

(For more on this topic, see Clinical Resource #380908 at PharmacistsLetter.com.)

Shang YS, Zhong PY, Ma Y, et al. Efficacy and Safety of Proton Pump Inhibitors in Patients With Coronary Artery Diseases Receiving Oral Antiplatelet Agents and/or Anticoagulants: A Systematic Review and Meta-Analysis. J Cardiovasc Pharmacol. 2022 Jul 1;80(1):1-12.

See LEADER NOTES for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. **Why are there questions about the safety and efficacy of proton pump inhibitors (PPIs) in patients with coronary artery disease (CAD) taking antithrombotics?**

2. **What type of study was this?**

3. **What was the search strategy for identification of information?**

4. **How were studies selected for inclusion in the meta-analysis?**

5. **How were data extracted and analyzed from selected studies?**

6. **How many studies were identified? What was the patient population?**

See LEADER NOTES for answers to discussion questions.

7. What were the results of the meta-analysis?

8. What were the strengths and limitations of the meta-analysis?

9. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW FINDINGS CHANGE CURRENT THERAPY?

10. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

DL is a 75-year-old male with past medical history of type 2 diabetes, hypertension, gastroesophageal reflux, hyperlipidemia, and osteoarthritis. DL was recently hospitalized with chest pain and found to have a non-ST elevation myocardial infarction (NSTEMI). During this admission, he had a heart catheterization showing single-vessel coronary artery disease (CAD) with 99% occlusion of the right coronary artery. He was successfully treated with drug eluding stent (DES) placement. Upon discharge, the cardiologist recommended dual anti-platelet therapy (DAPT) for 6 months. DL was started on clopidogrel plus aspirin 325 mg daily. His other medications include metformin 500 mg twice daily, lisinopril 20 mg daily, metoprolol XL 25 mg daily, atorvastatin 80 mg daily, naproxen 500 mg bid as needed for pain, and famotidine 20 mg as needed for heartburn.

See LEADER NOTES for answers to discussion questions.

You see DL a week after his hospital discharge. While reviewing his medication list, you see he is now on DAPT and consider whether he would benefit from a PPI to reduce his risk of GI bleeding.

11. What should you consider to determine whether to start DL on a PPI? What other medication adjustments should you make at this time?

You explain to DL that being on 2 antithrombotic medications increases his risk of a GI bleed. You recommend starting pantoprazole 40 mg daily and stopping famotidine. You also decrease his aspirin dose to 81 mg daily, and explain that higher doses aren't more effective and increase bleeding risk. Finally, you advise that DL try to avoid using naproxen since NSAID medications also increase GI bleeding risk. You suggest trying acetaminophen as an alternative when needed.

12. What side effects and potential drug interactions do you counsel DL about when starting a PPI?

You counsel DL about the possible risks of PPI use. You discuss that when DL is backed down to just 1 antithrombotic medication, tapering of the PPI should be considered.

You see DL a year later. During your medication review, you note that DL is still taking aspirin 81 mg daily but that clopidogrel has been stopped. However, DL is still on pantoprazole. You discuss having DL stop the pantoprazole. DL is concerned that stopping the PPI will cause his heartburn symptoms to flare back up.

13. How should you recommend DL taper off the PPI therapy?

See LEADER NOTES for answers to discussion questions.

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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com
Proton Pump Inhibitors: Appropriate Use and Safety Concerns. Pharmacist's Letter. August 2022.
Comparison of Proton Pump Inhibitors. Pharmacist's Letter. March 2022.
Proton Pump Inhibitor Dose Comparison. Pharmacist's Letter. March 2022.
Optimizing Care of Patients with Coronary Artery Disease. Pharmacist's Letter November 2021.
Appropriate Use of Oral Anticoagulants. Pharmacist's Letter. July 2022.
Safe Use of Anticoagulants. Pharmacist's Letter. December 2021.
Oral Anticoagulants for A Fib. Pharmacist's Letter. June 2018.
Comparison of Oral Anticoagulants. Pharmacist's Letter. December 2019.
Managing Bleeding With Anticoagulants. Pharmacist's Letter. July 2022.
Managing Anticoagulation Patients After a Bleed. Pharmacist's Letter. June 2022.

See LEADER NOTES for answers to discussion questions.