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JOURNAL CLUB

ISSN #1555-0095 (online)
Clinical Resource #350375

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

March 2019 • Vol. 16, No. 3
The following succinct analysis appeared in *Pharmacist's Letter*. Based on vol. 35. No. 3

STROKE

More patients will be discharged on a SHORT course of aspirin plus clopidogrel after a minor ischemic stroke or high-risk TIA.

We know aspirin ALONE is generally used to prevent another stroke.

But you'll see growing acceptance of DUAL antiplatelet therapy in these patients. It's already an option in guidelines...based on positive outcomes in Chinese patients using it for 3 weeks.

Now there's evidence the combo benefits a broader population. This is a big deal...since recurrent strokes can be disabling.

Using low-dose aspirin plus clopidogrel prevents another stroke within the next 3 months in about one in 50 patients versus aspirin alone.

The combo may cause major bleeding in up to one in 200 patients...but doesn't seem to increase intracranial bleeding.

Expect to see more of your patients getting aspirin 81 mg/day plus clopidogrel 75 mg/day after a minor ischemic stroke or high-risk TIA.

Don't suggest starting the second antiplatelet AFTER discharge. Explain that "earlier is better"...and there's not much evidence of benefit if the combo's started more than 24 hours poststroke.

Confirm that one antiplatelet, usually clopidogrel, is stopped within 21 days...or possibly as soon as 10 days for patients at higher bleeding risk. This seems to be the "sweet spot" to maximize benefit and limit bleeding. Then advise continuing aspirin 81 mg/day ALONE long-term.

But clarify WHY the patient's taking aspirin plus clopidogrel. For example, a recent coronary stent may need the combo for a longer duration.

See our chart, *Antiplatelets for Recurrent Ischemic Stroke*, for pros and cons of the various regimens and the role of other meds.

(For more on this topic, see Clinical Resource #350303 at PharmacistsLetter.com.)

Primary Reference – Hao Q, Tampi M, O'Donnell M, et al. Clopidogrel plus aspirin versus aspirin alone for acute minor ischaemic stroke or high risk transient ischaemic attack: systemic review and meta-analysis. BMJ 2018;363:k5108.

See LEADER NOTES for answers to discussion questions.

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DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. **What is known about antiplatelet regimens for prevention of recurrent ischemic stroke?**

ANALYSIS OF NEW STUDY

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?**

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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

MK is an 82-year-old female with a past medical history of hypertension, COPD, and long-standing type 2 diabetes. She is seeing you in clinic for hospital follow-up after a high-risk TIA ($ABCD^2$ score of five).

On discharge, MK was started on aspirin 81 mg daily plus clopidogrel 75 mg daily. In addition, MK is taking amlodipine 10 mg daily, lisinopril 40 mg daily, metformin 1,000 mg twice daily, insulin glargine 28 units at bedtime, pravastatin 10 mg daily, tiotropium inhaler two puffs daily, and albuterol inhaler every six hours as needed. MK smokes, but is down to five cigarettes per day.

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MK is accompanied by her son, who is moving in to help take care of her. MK lived with her husband until eight months ago when he passed away after a complicated hospital stay due to a GI bleed.

MK's vitals today are BP 149/84 mmHg, HR 73, O2 Sats 96% on room air, BMI 28.

11. What are the benefits and risks of DAPT after a minor ischemic stroke or high-risk TIA?

As expected, MK and her son are very concerned about the risk of bleeding with DAPT due to her husband's recent death due to GI bleeding.

12. What should you consider to limit MK's risk of bleeding due to DAPT?

You discuss the risks and benefits of DAPT, and emphasize that MK should only use it short-term, followed by a switch to low-dose aspirin alone. MK and her son agree that the benefits of DAPT seem to outweigh the risk, and they agree with continuing the short course.

In addition, they ask about other ways to limit MK's risk of another TIA or stroke.

13. What additional measures should you recommend to decrease MK's risk of recurrent TIA or stroke?

MK and her son are willing to add chlorthalidone 25 mg daily to her regimen and track her blood pressure at home. She is also in agreement to switch to atorvastatin 20 mg. MK's last A1C was 7.8% and she will continue to work on keeping her sugars under control.

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REFERENCES

Hao Q, Tampi M, O'Donnell M, et al. Clopidogrel plus aspirin versus aspirin alone for acute minor ischaemic stroke or high risk transient ischaemic attack: systemic review and meta-analysis. BMJ 2018;363:k5108.

Johnston SC, Amarenco P, Albers GW, et al. Ticagrelor versus aspirin in acute stroke or transient ischemic attack. N Engl J Med 2016;375:35-43.

Johnston SC, Easton JD, Farrant M, et al. Clopidogrel and aspirin in acute ischemic stroke and high-risk TIA. N Engl J Med 2018;379:215-25.

Kennedy J, Hill MD, Ryckborst KJ, et al. Fast assessment of stroke and transient ischaemic attack to prevent early recurrence (FASTER): a randomised controlled pilot trial. Lancet Neurol 2007;6:961-9.

Kernan WN, Ovbiagele B, Black HR, et al. Guidelines for the prevention of stroke in patients with stroke and transient ischemic attack: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke 2014;45:2160-236.

Kim JT, Park MS, Choi KH, et al. Comparative effectiveness of aspirin and clopidogrel versus aspirin in acute minor stroke or transient ischemic attack. Stroke 2018 Dec 7 doi: 10.1161/STROKEAHA.118.022691.

Powers WJ, Rabinstein AA, Ackerson T, et al. 2018 guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. Stroke 2018;49:e46-110.

Prasad K, Siemieniuk R, Hao Q, et al. Dual antiplatelet therapy with aspirin and clopidogrel for acute high risk transient ischaemic attack and minor ischaemic stroke: a clinical practice guideline. BMJ 2018;363:k5130.

Wang Y, Wang Y, Zhao X, et al. Clopidogrel with aspirin in acute minor stroke or transient ischemic attack. N Engl J Med 2013;369:11-9.

Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Chart, Antiplatelets for Recurrent Ischemic Stroke. Pharmacist's Letter/Prescriber's Letter. February 2019.
Chart, Smoking Cessation Drug Therapy. Pharmacist's Letter/Prescriber's Letter. February 2019.
Chart, 2018 ACC/AHA Cholesterol Guidelines. Pharmacist's Letter/Prescriber's Letter. January 2019.
Chart, Comparison of Oral Anticoagulants. Pharmacist's Letter/Prescriber's Letter. December 2018.
Chart, Aspirin for CV Primary Prevention and More. Pharmacist's Letter/Prescriber's Letter. November 2018.
Patient Education Handout, Aspirin and Your Heart. Pharmacist's Letter/Prescriber's Letter. July 2018.
Chart, Thrombolytics for Acute Ischemic Stroke. Pharmacist's Letter/Prescriber's Letter. July 2018.
Chart, The Truth About Aspirin. Pharmacist's Letter/Prescriber's Letter. April 2018.
Commentary, A Personalized Approach for A1C Goals. Pharmacist's Letter/Prescriber's Letter. April 2018.
Chart, Treatment of Hypertension. Pharmacist's Letter/Prescriber's Letter. January 2018.
Chart, Comparison of Oral Antiplatelets. Pharmacist's Letter/Prescriber's Letter. November 2017.

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