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Should You Switch the DAPT Agent a Month After ACS?

A randomized controlled trial says "Yes," but current guidelines say "No."

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PRACTICE CHANGER

Switch to clopidogrel from one of the newer P2Y12 blockers 1 month after an acute coronary event, while continuing aspirin, to decrease bleeding events without increasing the risk for ischemic events.[1]

STRENGTH OF RECOMMENDATION

B: Based on a single randomized controlled trial (RCT).

A 60-year-old man visits your clinic 30 days after he was hospitalized for acute coronary syndrome (ACS) due to ST-elevation myocardial infarction (STEMI). The patient underwent percutaneous coronary intervention (PCI) with placement of a stent and received aspirin and a loading dose of ticagrelor for antiplatelet therapy. He was discharged on dual antiplatelet therapy (DAPT) consisting of daily aspirin and ticagrelor. He asks about the risk for bleeding associated with these medications. Should you recommend any changes?

Platelet inhibition during and after ACS to prevent recurrent ischemic events is a cornerstone of treatment for patients after a myocardial infarction (MI).[2] Current American College of Cardiology/American Heart Association and European Society of Cardiology guidelines recommend that patients with coronary artery disease who recently had an MI continue DAPT with aspirin and a P2Y12 blocker (clopidogrel, ticlopidine, ticagrelor, prasugrel, or cangrelor) for 12 months following ACS to reduce recurrent ischemia.[2-4]

Studies have shown that using the newer P2Y12 inhibitors (prasugrel and ticagrelor) after PCI leads to a significant reduction in recurrent ischemic events, compared with clopidogrel.[5-7] These data prompted a guideline change recommending the use of the newer agents over clopidogrel for 12 months following PCI.[2]

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Follow-up studies show strong evidence for the use of the newer P2Y12 agents in the first month following PCI, but they also demonstrate an increased bleeding risk in the maintenance phase (from 30 days to 12 months post-PCI).[6,7] This increased risk is the basis for the study by Cuisset et al, which examined switching from a newer P2Y12 agent to clopidogrel after the initial 30-day period following PCI.

STUDY SUMMARY

Switched DAPT is superior

This open-label RCT (N = 646) evaluated changing DAPT from aspirin plus a newer P2Y12 blocker (prasugrel or ticagrelor) to a combination of aspirin and clopidogrel after the first month of DAPT post-ACS.[1] Prior to PCI, patients received a loading dose of ticagrelor (180 mg) or prasugrel (60 mg). Subsequently, all patients took aspirin (75 mg/d) and either prasugrel (10 mg/d) or ticagrelor (90 mg bid) for 1 month. After 30 days, participants who had no adverse events were randomly assigned in a 1:1 ratio to continue the aspirin and newer P2Y12 blocker regimen or switch to aspirin and clopidogrel (75 mg/d). In the following year, researchers examined the composite outcome of cardiovascular death, urgent revascularization, stroke, and major bleeding (defined by a Bleeding Academic Research Consortium [BARC] classification ≥ Type 2 at 1-year post-ACS).

Of the participants (average age, 60), 40% had a STEMI and 60% had a non-STEMI. Overall, 43% of patients were prescribed ticagrelor and 57% prasugrel. At 1 year, 86% of the switched-DAPT group and 75% of the unchanged-DAPT group were still taking their medication. The composite outcome at 1-year follow-up was lower in the switched group compared with the unchanged group (13.4% vs 26.3%; hazard ratio [HR], 0.48; 95% confidence interval [CI], 0.34-0.68; number needed to treat [NNT], 8).

Bleeding events (ranging from minimal to fatal) were lower in the switched group (9.3% vs 23.5%; HR, 0.39; 95% CI, 0.27-0.57; NNT, 7) and events identified

as BARC ≥ Type 2 (defined as needing medical treatment) were also lower in this group (4% vs 14.9%; HR, 0.30, 95% CI, 0.18-0.50; NNT, 9). There were no significant differences in reported recurrent cardiovascular ischemic events (9.3% vs 11.5%; HR, 0.80, 95% CI, 0.50-1.29).

WHAT'S NEW

Less bleeding, no increase in ischemic events

Cardiology guidelines recommend the newer P2Y12 blockers as part of DAPT after ACS, but this trial showed switching to clopidogrel for DAPT after 30 days of treatment lowers bleeding events with no difference in recurrent ischemic events.[2-4]

CAVEATS

Less-than-ideal study methods

In this open-label and unblinded study, the investigators adjudicating critical events were blinded to the treatment allocation. However, patients could self-report minor bleeding and medication discontinuation for which no consultation was sought. In addition, the investigators used opaque envelopes—a less-than-ideal method—to conceal allocation at enrollment.

CHALLENGES TO IMPLEMENTATION

PCP may not change cardiologist's prescription

Implementing this practice is facilitated by the comparatively lower cost of clopidogrel versus the newer P2Y12 blockers. However, after ACS and PCI treatment, cardiologists usually initiate antiplatelet therapy and may continue to manage patients after discharge. The primary care provider (PCP) may not be responsible for the DAPT switch initially; furthermore, ordering a switch may require coordination if the PCP is hesitant to change the cardiologist's prescription. Lastly, guidelines currently recommend using the newer P2Y12 blockers for 12 months.[2] **CR**

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