Antiplatelet Agents

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Antiplatelet therapy is a major part of modern cardiovascular therapy. Aspirin remains the foundation of antiplatelet therapy, though uncertainty remains regarding the optimal dose. Clopidogrel is an alternative to aspirin in secondary prevention, with modest superiority. Likely, its appeal will increase once it becomes generic. The combination of aspirin plus clopidogrel has been studied extensively and is of proven value in patients with acute coronary syndromes or undergoing percutaneous coronary intervention. The combination may also have a role in high-risk secondary prevention, but this needs further study. A randomized clinical trial evaluated prasugrel plus aspirin versus clopidogrel plus aspirin in patients with acute coronary syndromes undergoing percutaneous coronary intervention and found that prasugrel was superior for reducing ischemic events but did increase major bleeding. The combination of ticagrelor and aspirin has also been compared with clopidogrel plus aspirin in acute coronary syndrome patients and was found to reduce ischemic events, including cardiovascular mortality; however, overall major bleeding was not increased, though non-surgical bleeding was increased, while coronary bypass surgery bleeding was not significantly increased. Further studies with these drugs are ongoing, including different dosing regimens, including dosing based on point of care platelet function assays and genotypes. Novel antiplatelet agents are also being evaluated.

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