Oral Health Topics

Anticoagulant and Antiplatelet Medications and Dental Procedures

Key Points

There is both a growing number of individuals prescribed anticoagulation or antiplatelet therapy, as well as medications for this purpose. There is strong evidence for the older medications, as well as limited evidence for the new medications that, for most patients, it is not necessary to alter anticoagulation or antiplatelet therapy prior to dental intervention.

Drug Class	Drug Names
Anticoagulant*	• warfarin (Coumadin®)
Antiplatelet agents*	• clopidogrel (Plavix®) • ticlopidine (Ticlid®) • prasugrel (Effient®) • ticagrelor (Brilinta®) • aspirin
Target-specific oral anticoagulants**	• dabigatran (Pradaxa®) • rivaroxaban (Xarelto®) • apixaban (Eliquis®) • edoxaban (Savaysa® [Lixiana® in Europe, Japan, elsewhere])

* Strong evidence
** Limited evidence

Typical Patient

No need to discontinue medication; use local measures to control bleeding

Patients with Higher Risk of Bleeding

Any suggested modification to the medication regimen prior to dental surgery should be done in consultation with and on advice of the patient's physician

Introduction ›

Evidence: Warfarin and Antiplatelet Agents

Warfarin or antiplatelet agents such as clopidogrel (Plavix®), ticlopidine (Ticlid®), prasugrel (Effient®), ticagrelor (Brilinta®) and/or aspirin are commonly used in patients who have experienced a DVT or PE, patients who have had an MI and/or who have undergone cardiac stent placement, or in patients with NVAF.

There is general agreement that treatment regimens with these older anticoagulants/antiplatelet agents should not be altered before dental procedures.[5, 9-19] A 2009 systematic review and meta-analysis found no increased risk of bleeding associated with continuing regular doses of warfarin in comparison with discontinuing or modifying the dose for patients undergoing single and multiple tooth extraction.[11] A 2013 systematic review found no clinically significant increased risk of postoperative bleeding complications from invasive dental procedures in patients on either single or dual antiplatelet therapy.[9] In a 2013 statement, the American Academy of Neurology recommended that patients undergoing dental procedures continue taking aspirin or warfarin for stroke prevention.[13] A 2015 systematic review of management of dental extractions in patients receiving warfarin determined that patients whose International Normalized Ratio (INR; a measure of warfarin's therapeutic index) was in therapeutic range (i.e., 3.0 or less) could continue their regular warfarin regimen prior to the procedure.[19]

In February 2007, the American Heart Association, the American College of Cardiology, the Society for Cardiovascular Angiography and Interventions, the American College of Surgeons, and the American Dental Association published their consensus opinion about drug-eluting stents and antiplatelet therapy (e.g., aspirin, clopidogrel, ticlopidine).[6, 7] The consensus opinion states that healthcare providers who perform invasive or surgical procedures (e.g., dentists) and are concerned about periprocedural and postprocedural bleeding should contact the patient's cardiologist regarding the patient's antiplatelet regimen and discuss optimal patient management, before discontinuing the antiplatelet medications. Given the importance of antiplatelet medications post-stent implantation in minimizing the risk of stent thrombosis, the medications should not be discontinued prematurely.[6, 7]

Some patients who are taking one of these or multiple anticoagulant medications may have additional medical conditions that can increase the risk of prolonged bleeding after dental treatment, including liver impairment or alcoholism; kidney failure; thrombocytopenia, hemophilia, or other hematologic disorders; or may be currently receiving a course of cytotoxic medication (e.g., cancer chemotherapy). In these situations, dental practitioners may wish to consult the patient's physician to determine whether care can safely be delivered in a primary care office.[16, 17] Any suggested modification to the medication regimen prior to dental surgery should be done in consultation with and on advice of the patient's physician.[8, 15, 20]

Evidence: Target-Specific Oral Anticoagulants

Summary

References

Addtional ADA Resources

Other Resources

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