

Blood Thinners and Dental Care

Many dental patients are taking “blood thinner” medications for various medical conditions to prevent the formation of potentially harmful blood clots [e.g: stroke, heart attack, deep vein thrombosis (DVT), or pulmonary embolism (PE)]. However, these medications interfere with the body’s normal clotting mechanism to stop blood flow at a site of tissue injury, which is of concern to dentists for procedures that cause bleeding.

There are two main processes by which the body normally forms a blood clot. The first involves small blood cells called *platelets* which clump together at the wound to form a plug which slows the flow of blood through the vessel and forms a matrix. The next phase is coagulation when proteins in the blood interact with each other to fill in the spaces between the platelets, stabilize the clot, and make it more solid until bleeding stops.

Antiplatelet medication [i.e: **aspirin**, **Ticlid (ticlopidine)**, and **Plavix (clopidogrel)**] target the first phase of clot formation by preventing platelets from sticking to each other and to the blood vessel walls. Aspirin does this by creating permanent changes in the platelets which last throughout the lifetime of the platelet (7-10 days) which can only be reversed as the body produces new platelets that have not been exposed to the medication.

Anticoagulant medications [i.e: **Coumadin (warfarin)**] inhibit the second phase of clotting by blocking production or the function of proteins that stabilize the clot (anticoagulation). For *warfarin*,

it takes several days after the starting of medication to reach full anticoagulation effect, and several days after the medication is stopped for the anticoagulation to stop. In addition many foods and other medications can affect warfarin by either increasing or decreasing activity, therefore the physician needs to frequently monitor (with blood test - See Box to right) for too little or too much anticoagulation activity. There are newer anticoagulants such as

Pradaxa (dabigatran), *Xarelto (rivaroxaban)* and *Eliquis (apixaban)*,

which do not need as much time as warfarin to reach full anticoagulation effect, and also to stop that effect when discontinued. However, their anticoagulation activity cannot be monitored as easily as warfarin.

Lovenox (enoxaparin)

is used to prevent PE and DVT, and is given through self-injection.

Some Dental Procedures Associated with Bleeding

Dental prophylaxis (teeth cleaning)
Scaling and root planning (deep teeth cleaning)
Periodontal (gum) surgery
Tooth extractions
Dental implant placement
Biopsies

Preparations for dental procedure

Most of the time bleeding from dental procedures is not difficult to control and stop, even in patients who are taking blood thinners. However, both the effect of these medicines on clotting and the potential for bleeding from dental procedures varies between each patient. Therefore, for each procedure and patient, the risk of bleeding from the dental procedure must be weighed against the risk of harmful blood clot formation from altering the dose or discontinuing the medication.

INR

The INR is shorthand for **International Normalized Ratio**. For most medical conditions, the expected range for oral

Your dentist will want you to provide a thorough and complete medical history. Factors that he/she may ask you to provide include: all medical conditions (e.g: heart disease, irregular heartbeat, stroke, liver disease, kidney disease, history of blood clots); all current medications; name of your physician; purpose of antiplatelet and/or anticoagulation therapy medications; anticipated time that you will be on these medications; the results of any monitoring of the effects of these agents (blood test results); and any problems that you have had with your medicines. Your dentist may run some tests before your treatment and consult with your physician before doing the dental procedure. They may do the dental procedure in one of 3 ways: 1) continue taking the medications as normal; 2) change the dose or type of medications or; 3) stop the medication before the procedure. Furthermore, precautions may be made before, during and after the dental procedure to reduce the risk of significant oral bleeding. **Do not discontinue or alter your medications without the advice of your physician and dentist.**

QUESTIONS AND ANSWERS ABOUT BLOOD THINNER MEDICATIONS

Q: Is it necessary to check my clotting times before a dental appointment.

A: Depending upon the type of medication you are taking and the type of dental procedure that is to be performed, you may need to obtain specific blood tests that your dentist or physician orders shortly before your dental procedure. This will give your doctor an idea of how your medication is affecting your ability to clot after the procedure.

Q: Why not stop my blood thinners before dental care just to be safe?

A: There are cases that have shown that the risks of discontinuing these medications can be very dangerous, and many studies have proven that serious bleeding from most dental procedures, even while taking these medications, is very uncommon. Additionally, bleeding can be controlled in the dental office in many ways (pressure, stitches, medications, socket packing, etc.). Therefore, even with surgical procedures these important medications are seldom stopped, except in certain patients who have a high risk of bleeding. ***On the rare occasion when it is recommended that a medication be discontinued or changed, this decision is typically made by discussion between your dentist and physician.***

They will determine when and for how long any medication should be discontinued and when it should be resumed. These order should be followed explicitly.

Q: What measures can I take to minimize bleeding after a dental procedure?

A: ***Most invasive dental procedures result in bleeding that is well controlled if simple procedures are followed.*** For example, after surgical treatment applying firm pressure on the bleeding sites for 30 minutes with moist gauze or tea bags will usually stop the bleeding. Patients should refrain from spitting, rinsing, using a straw, drinking hot beverages, and smoking for at least the first 24 hours. Also, patients should avoid eating hard or sharp foods (such as pretzels, chips, nuts) for the first two to three days. Your dentist may also prescribe certain medications that can help minimize bleeding. Follow the instructions given to you by your dentist.

Q: At what point do I seek help for oral bleeding and whom should I contact?

A: If at any time you have a concern regarding bleeding after surgery, you should feel free to contact your dentist. If all the local precautions described above are taken and there is significant blood loss; meaning non-stop bleeding for more than several hours, or the formation of a very large blood clot (a “liver clot”), then you clearly should seek help. Your dentist should provide you with a means of contact after hours (i.e.: office or cell phone number, on-call pager), and failing that, you should visit your local emergency room.

Q: What other precautions should I take if I am on blood thinners?

A: *If you are prescribed any new medication (prescribed and over-the-counter) while taking blood thinner, make sure your prescribing doctor understands that you are on blood thinner medications.* Your pharmacy will also check for drug interactions, and if you have any doubts, consult your physician/ dentist to ensure there is no conflict. Be aware also that over-the-counter medications such as *Motrin, Advil and Aleve*, can increase the antiplatelet effects. Additionally ***“herbal” or “non-traditional” medications*** can interfere with, or increase the effects of your anticoagulant medications.

Additional Information May be Obtained from the American Heart Association

- [“What are Anticoagulant and Antiplatelet Agents?”](#)
- ["Anti-Clotting Agents Explained"](#)
- [“Aspirin and Heart Disease”](#)

Prepared by J. Napenas and the AAOM Web Writing Group
Prepared 5 May, 2015

The information contained in this monograph is for educational purposes only. This information is not a substitute for professional medical advice, diagnosis, or treatment. If you have or suspect you may have a health concern, consult your professional health care provider. Reliance on any information provided in this monograph is solely at your own risk.