

**UC Davis Health System Anticoagulation Services Recommendations for anticoagulation management before and after dental procedures**

This document is intended to assist providers in peri-procedural antithrombotic management in the general patient population. Patient specific evaluation of bleeding risks associated with the dental procedure as well as thromboembolic risks associated with the underlying disease state which requires anticoagulation is warranted. Patient specific management plans, including holding therapy, should be made in consultation with the patient's prescribing physician and dentist performing the procedure and communicated directly to the patient prior to the dental procedure.

Dental Procedure	Presumed Bleeding Risk	Peri-procedural recommendations*
<ul style="list-style-type: none"> <li>. Supraginival scaling</li> <li>. Simple restorations</li> <li>. Local anesthetic injections</li> </ul>	Low	Continue therapeutic anticoagulation
<ul style="list-style-type: none"> <li>. Subginival scaling</li> <li>. Subgingival preparation restoration</li> <li>. Standard root canal</li> <li>. Simple extractions</li> <li>. Regional anesthetic injections</li> </ul>	Moderate	Continue therapeutic anticoagulation
<ul style="list-style-type: none"> <li>. Extensive surgery</li> <li>. Apicoectomy (root removal)</li> <li>. Alevolar surgery (bone removal)</li> </ul>	High	Consider reducing anticoagulation**

\* For all procedures, local measures can be used to prevent or control bleeding. See next page.

\*\*If the plan is to reduce or completely reverse anticoagulation, consider...

**When extensive surgery is necessary and it is has been determined to lower the level of anticoagulation, the following can be considered as a guide in the pre-procedural period:**

**Warfarin**

- Withholding warfarin 2 to 7 days prior to procedure depending on the indication for and goal of anticoagulation. Longer holds should be considered for patients with either advanced age, systolic heart failure, or requiring low (<3mg/day) dosing.
- Possibly initiate a parenteral anticoagulant peri-procedure [heparin or low molecular weight heparin (LMWH)]
- Warfarin and the parenteral anticoagulant (if necessary) should be restarted when deemed appropriate and safe after the procedure, and the parenteral anticoagulant can be discontinued when the INR is within therapeutic range.

**Dabigatran**

- Hold dabigatran 1-2 days prior to procedure if CrCL > 50 mL/min
- Hold dabigatran 2-4 days prior to procedure if CrCl 30-50 mL/min
- Hold dabigatran 4-6 days prior to procedure if CrCl < 30 mL/min
- Restart dabigatran when deemed appropriate and safe after procedure

**Rivaroxaban**

- Hold rivaroxaban 1-2 days prior to procedure if CrCL > 50 mL/min
- Hold rivaroxaban 1-4 days prior to procedure if CrCl 30 - 50 mL/min
- Hold rivaroxaban 2-4 days prior to procedure if CrCl < 30 mL/min
- Restart rivaroxaban when deemed appropriate and safe after procedure

### Apixaban

- Hold apixaban 1-2 days prior to procedure if CrCL > 50 mL/min
- Hold apixaban 1-4 days prior to procedure if CrCl 30 - 50 mL/min
- Hold apixaban 2-4 days prior to procedure if CrCl < 30 mL/min
- Restart apixaban when deemed appropriate and safe after procedure

### Edoxaban

- Hold edoxaban 1-2 days prior to procedure if CrCL > 50 mL/min
- Hold edoxaban 1-4 days prior to procedure if CrCl 30 - 50 mL/min
- Hold edoxaban 2-4 days prior to procedure if CrCl < 30 mL/min
- Restart edoxaban when deemed appropriate and safe after procedure

The ACCP 2008 guidelines for antithrombotic and thrombolytic therapy recommend In patients who require a minor dental procedure, we suggest continuing VKAs with an oral prohemostatic agent or stopping VKAs (warfarin) 2 to 3 days before the procedure instead of alternative strategies (Grade 2C). [Douketis JD et al. CHEST 2012; 141:326-350S]

### **Local methods to prevent or control bleeding**

- local pressure (biting on gauze or tea bags)
- site packing (Gelfoam™, Surgicel™, Avitene™)
- additional suturing
- electrocautery
- topical thrombin
- mouth rinse(s)
  - cold water
  - aminocaproic acid 5% mouth rinse (5 grams in 100ml of sterile water)
    - Note: this solution may be difficult to obtain from a pharmacy unless prior arrangement have been made
  - hold 10ml in mouth for 2 min 1/2 hour pre-procedure then repeat q2h for 6-10 doses prn
  - tranexamic acid is **used in dentistry** in the form of a 5% mouth rinse after the procedure
- avoid additional bleeding risks (hot liquids, other mouth washes, and hard foods) for at least 24 hrs

Restart antiplatelet therapy when deemed appropriate and safe after procedure

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