



## Letter to the Editor

# Patient on Antithrombotics Drugs: Communication Between the Dentist and the Physician

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Many dental procedures invariably include a "bleeding event." The chance and severity of such events should be assessed on a relative risk rather than absolute risk. For example, when patients using antithrombotic agents for the management of their systemic illness (like coronary artery disease, cerbero vascular disease and major surgeries like hip joint /knee joint replacement) require any dental treatment, the dentist should weigh bleeding risk associated with the particular dental procedure together with the thrombotic risk. The dentist should also engage with the patient as well as patient's consulting physician to decide whether the antithrombotic agent needs temporary withdrawal.

Physicians, at large are less experienced to correlate the bleeding risks and complications associated with the type and duration of dental procedures which might negatively impact preventive or precautionary recommendations which they may provide.

Most guidelines and medical specialist consider dental procedures as minor interventions associated with a low risk of bleeding that can be managed with local hemostatic agents.<sup>[1,2]</sup> However, it may not be appropriate to handle all dental procedures as a homogeneous group when it comes to assessing the risk of bleeding. Failure to categorize

hemorrhagic risks into mild, moderate or severe events will create an illusion that they do not require monitoring and changes in the treatment regimens.<sup>[3]</sup> A sketch of the proposed procedure by the treating dentist will provide a rough estimate of the anticipated bleeding to the physician; studies have demonstrated blood loss in patients with normal hemostasis range from 5-10ml for a single tooth extraction,<sup>[4]</sup> 12- 62 ml for sectional periodontal flap surgeries (1-2 teeth).<sup>[9]</sup> Whereas full mouth flap surgeries, mandibular fracture, and Lefort fracture reduction may result in more than 350 ml to 420 ml of blood loss.<sup>[5,6]</sup>

Further, bleeding may vary significantly between patients and within the same patient at various times. These variations can be ascribed to local and systemic factors. Local factors include surgical field size, number of teeth extracted, prolonged surgery time and gingival or periodontal inflammation, while systemic factors include liver and kidney disorders or antithrombotic medication.<sup>[7]</sup>

To overcome this, we suggest a written summary should be provided to the physician by the dentist. The dentist should include the patient's medical and dental histories, recent reports from relevant hematological investigations and type of planned dental procedure in the referral letter (Table 1). The communication should help the consulting phy-

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**Table 1.** Checklist for the dentist writing referral letter to the physician.

Section/topic	Item no	Checklist item	Tick	
1. Medical and Dental History	1a	I. Reason for patient using antithrombotic drug : • Coronary artery disease • Cerbero vascular disease, • Peripheral vascular disease • Major surgeries • OTHERS		
		II. Type and duration of antithrombotic drug used by patient: • Antiplatelet / Anticoagulant • Monotherapy (Aspirin/Clopidogrel/Warfarin) • Dual therapy (Aspirin +Clopidogrel) • Combination (antiplatelet + anticoagulant) • Duration of drug intake (short-term/ lifelong)		
		III. Any other systemic illness (liver/kidney/ active cancer treatment etc.) <sup>[2]</sup>		
		IV. Other prescribed and non prescribed medication Nonsteroidal anti-inflammatory drugs, Long-term carbamazepine, selective serotonin reuptake inhibitors, herbal supplements, etc. <sup>[8]</sup>		
		1b	History of prolonged intraoperative or postoperative bleeding during earlier dental procedures for the patient.	
	2. Laboratory investigation		Recent reports of hematological investigations	
		2a	Patients on antiplatelet drugs: <sup>[9]</sup> • Bleeding time • Platelet function analyzer -100 • Platelet aggregation test • Multiple electrode analyzers	
		2b	Patients on anticoagulant drugs: • INR(International normalized ratio) • aPTT( activated partial thromboplastin time)	
		3. Dental procedure details and expected recommendation from a physician	3a	• Type and site of the dental procedure • Type of anesthesia: local or general • Approximate duration of the procedure • Single /multiple tooth involvement • Whether the procedure involves sectioning of bone and soft tissue • The severity of bleeding expected from the procedure
	3b		Expected recommendations from the physician regarding • Duration of drug withdrawal • When to restart the drug following surgery	

sician for suggesting either a modification or temporary withdrawal of antithrombotic drugs to be followed during the dental procedure. Vice-versa if a physician/cardiologist gets a request for evaluation of a patient's fitness for dental procedures they should insist the dentist to provide a detailed description of the treatment planned (section 3a of Table 1) before suggesting changes to the antithrombotic regimen.

Finally, the management approach should be individualized, taking into account the type of dental procedure, patient's medication and chronic conditions that may further influence the bleeding, it will be teamwork among the patient and his/her consulting specialists as well as treating dentist.

The objective of this communication is to help general

practitioners understand bleeding risks associated with dental procedures which will help them to make recommendations for modifications in drug regimens.

#### Disclosures

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** None declared.

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