Peninsula Dental Social Enterprise (PDSE)

Surgical Management of Patients on Anti-platelet Medication

Version 5.0

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Policy will be updated as required in response to a change in national policy or evidence-based guideline.

Clinical Guidelines for the Surgical Management of Patients on Anti-platelet Medication

Platelets provide the initial haemostatic plug at the site of vascular injury. They are also involved in pathological processes and contribute to thrombo-embolic phenomenon leading to myocardial infarction and ischemic strokes. All anti-platelet medications affect clotting but they do so by a variety of different mechanisms

Available anti-platelet medications include:

1. Low-dose Aspirin 75-300mg daily *Irreversible*
    - Note that many patients self medicate on low-dose aspirin.
2. Clopidogrel (Plavix) *Irreversible*
3. Prasugrel (Effient) *Irreversible*
4. Dipyridamole (Persantin, Persantin Retard) *Reversible*
5. Ticagrelor (Brilique) *Reversible*

- Other NSAID's have a reversible effect on platelet aggregation and platelet function is restored once the drug has left the circulation. They are not prescribed clinically for their anti-platelet activity.

Summary of Evidence

- Stroke and myocardial infarction have been associated with cessation of anti-platelet therapy approximately 10 days before the event.

- Stopping anti-platelet medication prior to surgical procedures may increase the risk of thrombo-embolic events.

- Postoperative bleeding after dental procedures can be controlled using local haemostatic measures in patients taking anti-platelet monotherapy.

- Bleeding complications, while inconvenient, do not carry the same risks as thromboembolic complications.

- Patients are more at risk of permanent disability or death if they stop anti-platelet medication prior to a surgical procedure than if they continue it.

- Published reviews of the literature available advise that anti-platelet monotherapy should not be stopped prior to dental surgical procedures.

- If patients are taking aspirin alone or in combination with another anti-platelet medication (dual therapy), treat without interrupting the medication(s).

Clinical Guidelines

- It is essential that students/staff take a full medical history and identify those patients on anti-platelet medication.

- Patients taking anti-platelet therapy with the following medical problems should not be treated in the DEF:
    - Liver impairment and/or alcoholism
    - Renal failure
    - Thrombocytopenia, haemophilia or any other disorder of haemostasis
    - Patients taking a course of cytotoxic medication

- If there are any concerns regarding the patient's medical history including medication(s), liaise with their GP prior to carrying out any surgical procedure. Simple extraction of up to three teeth can be carried out when the patient is on anti-platelet medications.

- If carrying out multiple extractions, assess the severity of bleeding after each extraction and only proceed to the next extraction if bleeding is assessed to be manageable. Otherwise, consider staging the extractions at appropriate intervals.

- Surgery should ideally be carried out at the beginning of the day and the beginning of the week. This way any re-bleeding can be dealt with during the working day or week.

- A LA containing a vasoconstrictor should be given by infiltration or intraligamentary injection, if practical. Local vasoconstriction may be encouraged by infiltrating a small amount of LA with adrenaline close to the site of surgery.

- The procedure should be as atraumatic as possible. The Clinical Supervisor should be involved if necessary.

- Each root socket should be packed gently with appropriate hemostatic agent (surgicel / gelfoam) followed by suturing with 3/0 or 4/0 Vicryl Rapide preferably using horizontal mattress sutures. Following closure, pressure should be applied to the socket(s) with a bite pack for 15 minutes.

- Haemostasis must be achieved prior to the patient leaving the surgery.

- The patient should be given a Postoperative Instruction Sheet for Patients taking Anticoagulant or Anti-platelet Therapy. These include out-of-hours contact details should the patient have any episodes of postoperative bleeding.

- Paracetamol is recommended for postoperative analgesia. Aspirin at analgesic doses and NSAID's (Ibuprofen) should be avoided.

- If there are any concerns, a follow-up appointment should be made for the patient on the next available clinic.