Articles Referenced in Dr. Sarah Dirks' Presentation on Geriatric Dentistry

Myths of dental surgery in patients receiving anticoagulant therapy

Background: When patients receiving continuous anticoagulant therapy are receiving dental surgery, a decision must be made whether to continue or interrupt the anticoagulant therapy.

Results: Of more than 950 patients receiving continuous anticoagulant therapy (including many whose anticoagulation levels were well above currently recommended therapeutic levels) who underwent more than 2,400 surgical procedures, only 12 (< 1.3 percent) required more than local measures to control hemorrhage. Only three of these patients (< 0.31 percent) had anticoagulation levels within or below currently recommended therapeutic levels. Of 526 patients who experienced 575 interruptions of continuous anticoagulant therapy, five (0.95 percent) suffered serious embolic complications; four of these patients died.

Conclusions: Serious embolic complications, including death, were three times more likely to occur in patients whose anticoagulant therapy was interrupted than were bleeding complications in patients whose anticoagulant therapy was continued (and whose anticoagulation levels were within or below therapeutic levels). Interrupting therapeutic levels of continuous anticoagulation for dental surgery is not based on scientific fact, but seems to be based on its own mythology.

Antiplatelet therapy and exodontia

The authors reviewed the literature, focusing on the indications and mechanisms of antiplatelet therapy and the perioperative management of patients taking these agents who require exodontia or other dentoalveolar surgery.

Results: Dentists making management decisions regarding patients taking antiplatelet therapy should consider the patient's risk of experiencing perioperative hemorrhage against the risk of experiencing complications associated with thromboembolic events. The risk of perioperative bleeding complications is low for patients taking single or dual antiplatelet therapy. Intraoperative and postoperative bleeding can be controlled with local hemostatic measures.

Conclusion: For patients taking antiplatelet medication, bleeding risk for exodontia is generally lower than the risk of experiencing thromboembolic events owing to cessation of therapy.

Practical Implications: Dentists can safely complete exodontia in patients who continue taking antiplatelet therapy. The dentist should consult the patient's prescribing physician before considering altering the patient's antiplatelet therapy regimen.

Randomized clinical trial on arresting dental root caries through silver diamine fluoride applications in community-dwelling elders

Objectives: To investigate the effectiveness of silver diamine fluoride (SDF) solution application in arresting dental root caries and to assess the color of arrested caries lesions.

Methods: 83 elders with 157 root surfaces with active caries lesion were randomly allocated into 3 groups: Gp1 (placebo control)-annual application of soda water; Gp2-annual application of SDF solution; Gp3-annual application of SDF solution immediately followed by potassium iodide (KI) solution. Status of root surfaces was assessed every 6 months.

Results: After 30 months, 100 (64%) of the included root caries lesions were reviewed. The arrest rates of root caries were 45%, 90%, and 93% in Gp1 (control), Gp2 (SDF) and Gp3 (SDF/KI), respectively. Pairwise comparisons showed elders in the control group had a lower proportion of the active root caries changed to arrested and the proportions of root caries being arrested in the SDF and SDF/KI groups were not significantly different.

Conclusions: Application of SDF solution, with or without application of KI afterwards, is effective in arresting root caries among elders in a water fluoridated area. In the long term, blackening of arrested root caries is not reduced by immediate application of KI after the application of SDF.