



KNOWLEDGE, ATTITUDE, PRACTICE AMONGST DENTAL PRACTITIONER REGARDING MANAGEMENT OF PATIENTS UNDERGOING ANTICOAGULANT THERAPY

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ARTICLE INFO

Article History:

Received 10th April, 2017

Received in revised form 9th May, 2017

Accepted 4th June, 2017

Published online 28th July, 2017

Key words:

Anticoagulants, aspirin, warfarin.

ABSTRACT

Background: Cardiovascular disease is most common in elderly patients nowadays. Due to this patients taking anticoagulants have been increased. The side effect of this anticoagulant is that they prolong bleeding time after surgeries which may cause complications. Some studies suggests to stop anticoagulants before the surgeries to prevent potential bleeding but stopping warfarin before major surgeries might cause consequences.

Aim and Objective: To asses the knowledge attitude and practice amongst dental practitioner regarding management of patients undergoing anticoagulant therapy.

Materials and Methods: A self administered questionnaire was distributed among the dentists to asses their knowledge attitude and practice regarding anticoagulant dental treatment.

Results: A total of 100 questionnaires were distributed and were return complete. The most recommended anticoagulant by the dentists was aspirin (76 %) followed by warfarin (22%). According to most of the dentists discontinuation of anticoagulants differ with dental procedure.

Conclusion: This findings showed that dentists hadknowledge about the anticoagulant therapy. Further, educational program should be conducted to improve dentists knowledge and attitude on management of anticoagulant therapy.

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INTRODUCTION

Anticoagulants drugs are agents that reduce the ability of blood to form clots, or coagulate. ^[1] Oral anticoagulants drugs are widely prescribed for the prevention of various medical conditions, including thromboembolism, atrial fibrillation, multiple venous thromboembolism, congestive heart failure and artificial heart valves. ^[2] The most commonly used anticoagulant and anti-platelet drugs include aspirin, warfarin, enoxaparin, aspirin and clopidogrel. ^[3] Patients with chronic illness are often prescribed with oral antithrombotics which includes both anti-platelets and anti- coagulants. These medications have important implications when performing a dental procedure. Research says that Increased cerebrovascular disease is seen in Indian continent. ^[4] These drugs cause desired changes in coagulation for specific set of patients but can cause excessive bleeding preoperative and post operatively in the oral surgical procedures. ^[5] Previously, cessation of Oral anti coagulation therapy for few days was used as strategy to reduce postoperative bleeding but now, it is considered to be a potential risk factor for developing thromboembolism and causing unacceptable increase in

mortality. ^[6] Most of the dentists follow varied practices inspite of following already existing protocols. Some study showed that dentists had a relative lack of knowledge and thus inability to manage these patients during a minor oral surgical procedure. ^[7] This survey is conducted to evaluate their knowledge, attitude and practices regarding dental management of patients on antiplatelet therapy.

MATERIALS AND METHODS

A questionnaire based survey was conducted among the dentists. A self administered questionnaire was developed to asses the dentists about the knowledge attitude and practice regarding management of patients undergoing anticoagulant therapy. The questionnaire was categorised based on their demographic details which includes their age gender and the second section contains the dentists knowledge on the management of patients receiving anticoagulant therapy. The questionnaire was distributed to 100 dentists of various clinics and were collected. It was statically analysed and the results were obtained.

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Questionnaire

- 1 Do you know that anticoagulants are commonly prescribed for patients with increased risk of bleeding?
1. Yes. 2. No
- 2 Do you advise the patient to discontinue the anticoagulant therapy before dental procedure.
1. Yes. 2. No
- 3 Which one of these is the most commonly prescribed.
1. Aspirin. 2. Warfarin 3. Clopidogrel
- 4 When do you normally prefer to stop the anticoagulant before dental treatment
1. day. 2. 3 days. 3. 5 days. 4. 7 days.
1. Minor surgical procedure can be carried out safely, without stopping the antiplatelet medications?
1. Yes. 2. No.
6. Do you think evidence based guidelines will be helpful in dental management of patients on antiplatelet therapy?
1. Yes. 2. No

RESULT

Total of 100 questionnaires were distributed and were returned complete. Upon which 41% were male and 59% were female. Most of the dentist were between 30- 40 yrs of age (62%). Most of them has 10- 15 years of clinical experience (57%). Dentists were asked about the most concerned anti coagulant drug. 76% of them prefer Aspirin as the most concerned anticoagulant. Only 22% of the dentist prefer giving warfarin (fig 1).

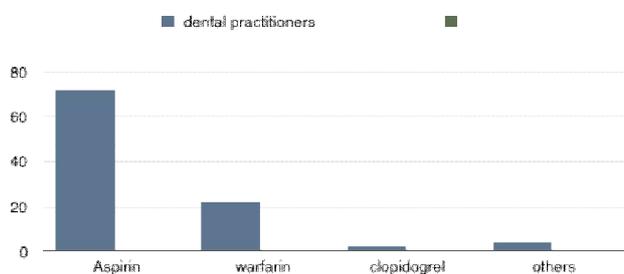


Fig 1 Most Concerned Anticoagulant

46% of the dentists prefer stopping aspirin before the dental procedure. 28% of them prefer stopping warfarin and 15% of them prefer stopping clopidogrel while the remaining 11% of the dentist prefers to continue medication (fig 2).

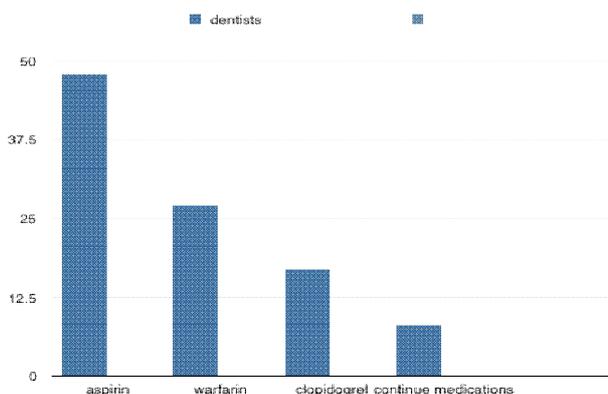


Fig 2 Medicines to be stopped before dental procedure

Only 35% of the dentist follows evidence based guidelines for all dental procedure while 12% of them doesn't follow already existing evidence based guidelines. 50% of the dentist said that they follow evidence based guidelines for complicated surgeries whereas they don't follow for minor surgeries like extraction (fig 3).

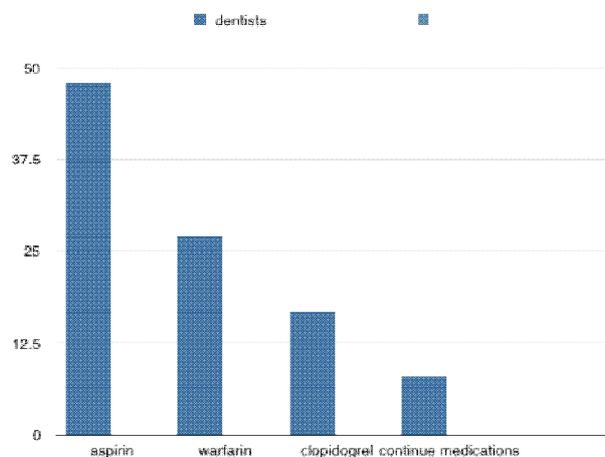


Fig 3 Opinion about benefiting from evidence based guidelines in patient management

DISCUSSION

Antiplatelet agents are widely used in prevention and treatment of various ischemic cardiovascular and cerebrovascular conditions. The most commonly used antiplatelet drugs include aspirin warfarin and clopidogrel^[3]. Number of evidence suggests that stopping antiplatelet therapy before dental procedure may increase risk of thromboembolic events.^[8] Post-operative bleeding associated with the use of warfarin can be life threatening as compared to aspirin^[9]. These results could be explained on the basis that though the dentists are aware and updated about the current recommendations, they find it difficult to translate it into practice.^[10] Dentists have been following the routine non-evidence based practice of stopping the medication before treatment for fear of excessive post-operative bleeding^[11]. They follow the evidence based guidelines for complicated surgeries. For minor surgeries they follow various dental procedure. In a study only 15.4% of the practitioners were in favour of continuing anticoagulant therapy while 6.6% were unsure of it. 58% of the dentist prefer following evidence based guidelines in which only 35% of the follows it.^[3] Another study' result shows that 96% of the dentists prefer stopping oral anticoagulant medications for surgical procedures such as periodontal therapy, implants, impaction surgery and multiple teeth extractions.^[4] A result of the study says that 33.3% of dentists were in favour of cessation of warfarin, while 10.4% preferred maintenance of OAT.^[5] Current study also showed that majority of dentists relied only on the traditional haemostatic agents.^[7] In another study 77% of the dentists wants to stop the anti coagulant therapy. In a study it was found before dental procedures, such as simple tooth extractions, antiplatelet therapy, and especially oral anticoagulants, are still more frequently discontinued than clinically recommended and the decision to discontinue the protective medication is mostly taken in consultation with the general practitioner or specialist of the patients.^[12] One prospective study concluded that there is no need to stop the antiplatelet dose of aspirin before simple tooth extraction

as there was 0% incidence of post-operative bleeding in their patients.^[13] One study concluded that risk of stopping antiplatelet therapy and predisposing the patient to thromboembolic events far outweighed the negligible risk of bleeding from dental procedures.^[14] Hence it is concluded that the patient should not be predisposed to risk of thromboembolism by stopping either antiplatelet monotherapy or dual therapy^[15]

CONCLUSION

This results from this study shows that the dentists have more knowledge and attitude about the management of anticoagulant therapy. In this study most of the dentists were not following evidence based guidelines. Further programs should be conducted for the dentists to gain knowledge about the management of anti coagulant therapy and to follow evidence based guidelines.

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How to cite this article:

Godlin Jeneta J *et al* (2017) 'Knowledge, Attitude, Practice Amongst Dental Practitioner Regarding Management of Patients Undergoing Anticoagulant Therapy', *International Journal of Current Advanced Research*, 06(07), pp. 4921-4923. DOI: <http://dx.doi.org/10.24327/ijcar.2017.4923.0615>
