

Original article



OPINION SURVEY OF THE GENERAL PRACTITIONERS IN BULGARIA REGARDING THERAPY WITH ACETYLSALICYLIC ACID, CLOPIDOGREL AND ACENOCOUMAROL IN PATIENTS UNDERGOING DENTAL EXTRACTATIONS.

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SUMMARY

Purpose: Cardiovascular diseases are leading cause of mortality and disability worldwide. Major role in the treatment and prophylaxis of these diseases and their complications have antiplatelet and anticoagulation drugs. Routine practice in the past was an interruption of antiplatelet and anticoagulant medication before dental extraction. Today most authors and dental associations recommend maintaining therapeutic levels of antithrombotic drugs in single or multiple teeth extractions due to the fact that the risk of serious thromboembolic complications outweighs the risk of bleeding. The aim of the present study is to determine the opinion and approach of the General Practitioners in Bulgaria regarding therapy with Aspirin, Clopidogrel and Acenocoumarol in patients undergoing dental extractions.

Material and Method: 282 General Practitioners were interviewed for their approach to the antithrombotic therapy with Acetylsalicylic acid (Aspirin) Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom) in patients undergoing dental extractions.

Results: There is no consensus and an established protocol on the cessation of Acetylsalicylic acid (Aspirin) Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom), and for what period of time before dental extraction.

Conclusion: Among General Practitioners in Bulgaria there is no approved protocol regarding administration of Acetylsalicylic acid (Aspirin) Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom) in patients undergoing teeth extraction.

Keywords: general practitioners, acetylsalicylic acid, clopidogrel, acenocoumarol, tooth extraction

INTRODUCTION

Cardiovascular diseases are leading cause of death and disability worldwide. [1] Leading in the treatment of

these diseases and prophylaxis of their complications is antiplatelet and anticoagulant therapy. Routine practice in the past was discontinuation of the antithrombotic drug prior to dental extraction [2, 3]. Today, most authors and professional organizations recommend maintenance of therapeutic levels of antithrombotic drugs in single and multiple teeth extractions due to the fact that the risk of serious thromboembolic complications outweigh the risk of hemorrhage [4 - 9] However, controversial opinions still exist in literature and in the practice. [10, 11]

MATERIAL

The aim of the present study is to establish the opinion and approach of the General Practitioners in Bulgaria regarding treatment with Acetylsalicylic Acid (Aspirin), Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom) in patients undergoing dental extractions.

For that purpose 282, General Practitioners were interviewed for their approach to the antithrombotic therapy with Acetylsalicylic acid (Aspirin), Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom) in patients with forthcoming dental extractions.

The representative research was conducted at National Congresses and various scientific events of the Society of General Practitioners in Bulgaria in the period 2015-2016.

METHODS

Sociological Method

A questionnaire containing eleven questions was developed. Gender, specialty, work experience, work placement, patients taking antithrombotic drugs, approach regarding the intake of Aspirin, Clopidogrel and Acenocoumarol (Sintrom) before tooth extraction, postponement of tooth extraction until the completion of the antiplatelet therapy, thromboembolic complications due to the interruption of the antithrombotic therapy, bleeding complications after tooth extraction. Except questions for

the work placement, speciality and work experience, respondents indicated one of two, three or four possible answers.

RESULTS

The characteristics of the surveyed contingent are presented in Table 1.

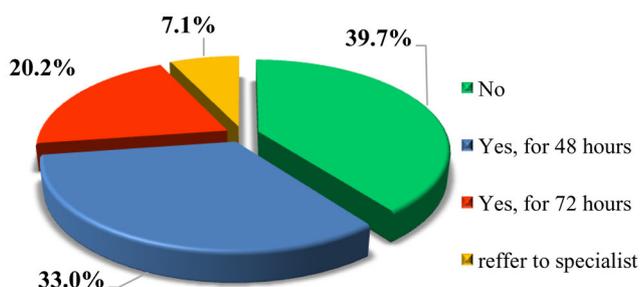
Table 1. Characteristics of the contingent

Characteristics		Number	Percentage %	Standard error
Total number Interviewed GPs		282	100%	
Gender	Male	80	28,4%	2,7%
	Female	202	71,6%	2,7%
Work experience	Up to 10 years	21	7,4%	1,5%
	11-15 years	216	76,6%	2,5%
	Over 16 years	45	16,0%	2,2%
Work placement	Over 100 000 residents	183	64,9%	2,8%
	Under 100 000 residents	99	35,1%	2,8%

To the question: “Do you have patients receiving anticoagulant and/or antiplatelet drugs?” positively responded (99.6%). Only 1 gave a negative response (0.4%).

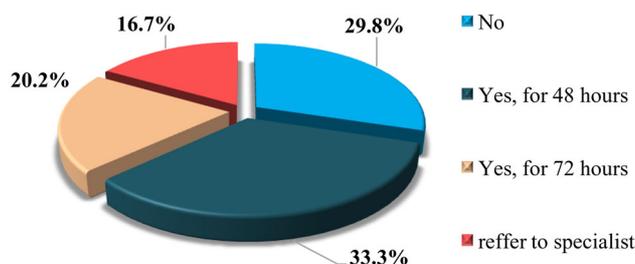
To the question: “Are you interrupting the intake of Acetylsalicylic Acid (Aspirin) to your patients before dental extraction?” with possible answers: “No”, “Yes, for 48 hours”, “Yes, for 72 hours”, “I consult with a specialist”; over 1/3 (39.7%) consider that there is no need to discontinue Acetylsalicylic Acid (Aspirin) in patients with forthcoming dental extraction; 33.0% discontinue the intake for 48 hours; 20.2% - for 72 hours and 7.1% - consult patients with a specialist before tooth extraction (Figure 1).

Fig. 1. The General Practitioners’ attitude towards discontinuation of the Acetylsalicylic Acid (Aspirin) before dental extraction.



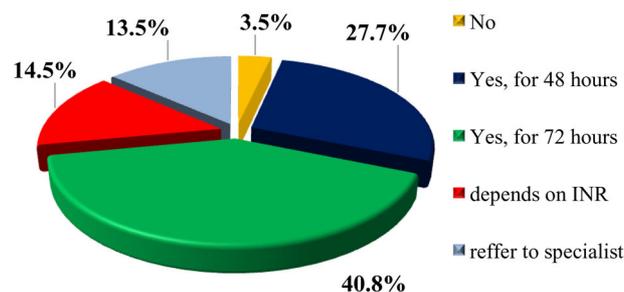
To the next question: “Do you temporarily discontinue Clopidogrel (Plavix, Trombex, or another brand) in your patients before teeth extraction?”, with possible answers: “no”, “yes, 48 hours”, “yes For 72 hours”, “refer to a specialist”; about 1/3 (29.8%) of respondents do not consider for necessary to discontinue Clopidogrel before tooth extraction; 33.3% discontinue the drug for 48 hours; 20.2% for 72 hours and 16.7% - consult the patient with specialist before teeth extraction (Figure 2).

Fig. 2. General Practitioners’ attitude to discontinuation of Clopidogrel (Plavix, Trombex or another brand) on upcoming teeth extraction.



To the question: “Are you discontinue intake of Acenocoumarol (Sintrom) to your patients prior to teeth extraction?” with possible answers: “No”, “Yes for 48 hours”, “Yes for 72 hours”, “Depends on the level of INR” and “Refer to a specialist”; only 3.5% of the respondents do not consider for necessary to discontinue Acenocoumarol (Sintrom) before tooth extraction, 27.7% discontinue the intake for 48 hours. Most (40.8%) of the respondents discontinue the intake for 72 hours before teeth extraction, and only 14.5% discontinue Acenocoumarol depending on the level of INR. 13.5% consult the patients with a specialist (Figure 3).

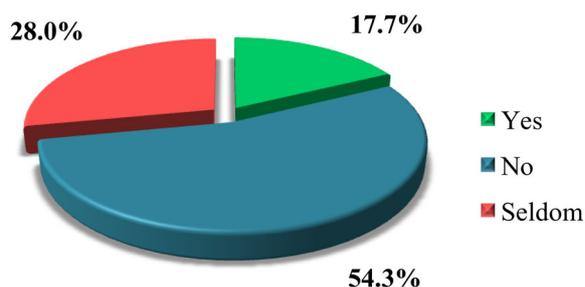
Fig. 3. The attitude of the General Practitioners to discontinuation of Acenocoumarol (Sintrom) prior to teeth extraction.



Since some patients have taken an antithrombotic drug for a certain period of time, we asked GPs, “Do you postpone teeth extraction until antithrombotic therapy is completed in some patients?” Possible answers to this question are: “Yes”, “No” and “Seldom”.

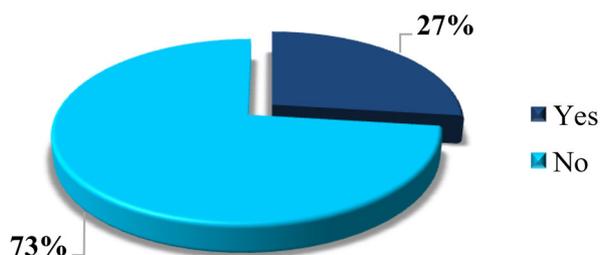
From the results is clear that more than half of the respondents (54.3%) did not postpone teeth extraction; 17.7% postponed extraction until the end of treatment, and 28.0% rarely had such cases (Figure 4).

Fig. 4. The attitude of General Practitioners to the postponement of teeth extraction until the completion of antithrombotic therapy.



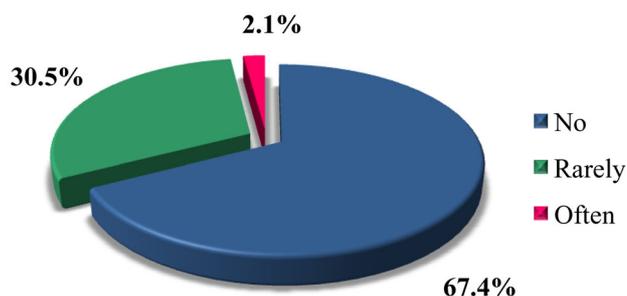
To the question “Have you had thromboembolic complications in your patients due to discontinuation of the antithrombotic therapy?” approximately 1/3 (27.0%) of the respondents reported that their patients had received thromboembolic complications as a result of the discontinuation of the antithrombotic therapy. (Figure 5)

Fig. 5. Thromboembolic complications as a result of the discontinuation of the antithrombotic therapy.



To the question: “Have your patients, receiving antiplatelet/anticoagulant, had hemorrhagic complications after dental extraction?” over 2/3 (67.4%) gave a negative response, 30.5% reported very rare cases of hemorrhagic complications, and only 2.1% reported frequent cases of hemorrhagic complications after tooth extraction (Figure 6).

Fig. 6. Haemorrhagic complications after dental extractions in patients taking antiplatelet/anticoagulant.



DISCUSSION

From the results it is clear that many of the patients of the General Practitioners in Bulgaria are taking antithrombotic medications.

Regarding the intake of Acetylsalicylic acid, there is no established protocol and approach on whether the medication should be interrupted and for what period of time before dental extraction. Almost 40% of the surveyed GPs did not consider for necessary to discontinue intake of Acetylsalicylic acid before tooth extraction, which coincide with most current recommendations. [12 - 15] Similar information is obtained regarding Clopidogrel before tooth extraction. Approximately 30% of GPs do not consider for necessary to discontinue the drug, 33% discontinue Clopidogrel for 48 hours, and 20% consider it necessary to stop Clopidogrel 72 hours before dental extraction. [16, 17] Only 7% of GPs refer their patients to a specialist.

With regard to Acenocoumarol (Sintrom), there is again no unanimous opinion and approach whether it should be stopped and for how long before extraction. The highest percentage (40.8%) of the interviewed General Practitioners considered for necessary to discontinue Acenocoumarol (Sintrom) for 72 hours before tooth extraction. Only 15% of respondents considered that cessation of the drug depend on INR level and 13.5% refer the patient to a specialist. 3.5% of respondents do not consider for necessary to discontinue Acenocoumarol (Sintrom) before teeth extraction.

Thromboembolic complications as a result of the discontinuation of therapy were reported by 76 (27%) of the interviewed GPs.

Nearly half of the respondents (46%) postpone dental treatment, until the completion of the therapy with antiplatelet/anticoagulant drug.

CONCLUSIONS

A large number of patients are taking medications that alter normal haemostasis. Despite the recommendations of many professional organizations, there is still no single protocol among General Practitioners in Bulgaria with regard to the intake of Acetylsalicylic Acid (Aspirin), Clopidogrel (Plavix, Trombex) and Acenocoumarol (Sintrom) in forthcoming dental extractions.

Often in practice, treating doctors overestimate the risk of postoperative haemorrhage and postpone dental treatment or discontinue the antithrombotic therapy before teeth extraction, underestimating the risk of thrombotic complications.

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