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„The assessment of the patients' knowledge about the safety profile of acetylsalicylic acid in the prevention of cardiovascular diseases”

Abstract

The aim of the study

The aim of the study was to assess the knowledge of patients taking acetylsalicylic acid (ASA) in the prevention of cardiovascular diseases about the safety profile of the drug.

Detailed objectives:

- Investigation of the patients’ knowledge about the side effects of ASA;
- Assessment of the level of information about the safety profile given by a person ordering the medication;
- Determination of the range of therapeutic indications among patients;
- Determination of the statistically significant factors affecting the patients’ knowledge about the safety profile of ASA;
- Determination of the type of applied prevention and treatment of cardiovascular diseases in the group of patients depending on the medical specialization and experience of the ordering doctor;
- Determination of the efficacy of ASA in the prevention of cardiovascular diseases and the factors increasing the risk of incidents occurring during taking the medication;
- Determination of the types of side effects appearing after taking ASA in the group of examined patients and the identification of the factors affecting their appearance.

Methods

There were 300 patients (152 women and 148 men) included in the survey research who took ASA in the prevention of cardiovascular diseases. Based on the original questionnaire, the data about the age, gender, BMI, education, co-morbidities, cardiovascular incidents, cause and length of taking ASA, knowledge about the ASA safety profile and side effects

that the patients had ever experienced have been collected. The statistical analysis has been made with the use the Statistica. Chi-squared independence tests for quality and Spearman's rank correlation coefficient for measurable features have been used.

Results

The average age of the examined patients was 66.82 (SD=12,54). A total of 131 patients (43.67%) were overweight and 94 (31.33%) were obese. The biggest group of patients had secondary education (n=137, 45.67%), 71 patients (23.67%) had higher education and 57 (19%) primary education. 41.33% of patients (n=124) declared taking ASA for more than 5 years. The most frequent reason for taking ASA was a myocardial infarction (n=98, 32.66%). Indicated reasons for admission of ASA have been classified into two groups: primary prevention CV diseases (n=170, 56.67%) and secondary prevention (n=130, 43.33%). Primary care doctors were administering ASA significantly more often in the primary prevention than specialist doctors – cardiologists following numerous clinical recommendations about antiplatelet therapy (χ^2 p=0.00000). Enteric-coated tablets were a dominant form, they were taken by 99% (n=297) patients. 63.67% (n=191) of examined patients claimed that they had not been informed about ASA's possible side effects. Only 32 patients (10.67%) identified all the side effects correctly and 189 patients (63%) had insufficient knowledge about possible side effects. The most frequently mentioned side effect of using ASA was bleeding (n=131). Three of six examined factors have a significant impact on the knowledge about the safety profile of ASA, which are a length of ASA admission (negative correlation: p=0.022759), education (χ^2 p=0.02071) and age (χ^2 p=0.00001). In comparison with the rest of patients, those with higher education had 3.38 times greater chances of possessing a very good level of knowledge, whereas patients with primary education had 2.57 times greater chances of having insufficient knowledge. The oldest patients, those over 65 years old, had 2.5 times greater chances of possessing an insufficient knowledge level, whereas the younger ones had 3 times higher chances of having a very good knowledge level. In case of the rest of other factors such as being informed about possible side effects by a specialist administering the treatment, type of applied prevention and a sex, no significant impact has been identified.

The occurrence of side effects during admission of ASA was declared by 66 patients (22%). Their presence was significantly associated with the age (χ^2 p=0.01026). Patients up to 54 years old had 12 times lower risk of side effects in comparison with older patients. Factors such as a length and a reason for admission, BMI and a dose of ASA did not have a significant impact on the occurrence of the side effects.

Having had cardiovascular incidents in the history doubles the risk of the next incident (χ^2 p=0.00574). Also, the age of the patients had a significant impact on the increasing risk of the cardiovascular events during admission of ASA (χ^2 p=0.02806). People up to 54 years old had 2 times greater chances of not experiencing the episode than people over 65 years old. The other assessed factors: BMI, hypertension and diabetes did not have any statistically significant impact on occurrence of the incidents.

Conclusions

1. The knowledge of the patients about the safety profile of acetylsalicylic acid taken in the prevention of cardiovascular diseases significantly depends on the education, age of patients and length of admission of the medication. People with higher education, younger ones and those taking ASA on a short-term basis were characterised by the greater level of the knowledge.
2. Based on the obtained results it has to be indicated that respondents are characterised by the low level of their knowledge about the side effects of taking acetylsalicylic acid. Therefore, there is need for better patients' education about that topic.
3. In patients taking ASA as a primary prevention, cardiovascular incidents occurred more rarely than in patients taking the medication as a secondary prevention. The risk of occurrence of cardiovascular incidents rises in patients that have already had the incidents.
4. Rising age of the patients in the whole examined group was a significant factor increasing the risk of cardiovascular incidents. When analysing the reason for admission of the medicine, statistically significant relationship concerned only patients taking ASA as a prevention of secondary cardiovascular incidents.
5. In patients taking ASA as a part of primary cardiovascular prevention, side effects occurred more rarely than in a group of patients taking ASA as secondary prevention.
6. The rising age of the patients had a significant effect on increasing the risk of side effects during admission of acetylsalicylic acid. Indicated side effects had a mild character and did not threaten patients' lives.
7. Despite officially recommended therapeutic guidelines, a significant part of the patients take acetylsalicylic acid as primary prevention of cardiovascular diseases.
8. A dominant pharmaceutical form of the medicinal product with acetylsalicylic acid taken by patients are enteric-coated tablets.