

show statistically significant differences in the average score received during the session by students who took medicines and did not take drugs and, improvement and no improvement of the score after taking drugs.

Conclusions

1. As a result of the study, we did not identify there is a significant difference in cognitive improvement in students taking medications and students who did not use medication during the examination session. In my opinion, the reasons for “lack of achieve” in the use of drugs are the lack of indications for using it; incorrect dose selection, insufficient duration of medication; the use of sedatives that balance the processes of arousal and inhibition of the brain, which leads to a decrease in its activity. So, consult the doctor before taking the medication.

2. The use of mental stimulants during the exam session can be seen as an additional factor only in the systematic preparation for training during the semester, which in turn will reduce the impact of exam stress and improve the quality of education which has been explored from the students by questionnaire method.

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STRUCTURE OF HOSPITALIZED PATIENTS WITH MIGRAINE ATTACKS AND FEATURES OF THEIR THERAPY

Introduction

Migraine is a disease with biphasic change in cerebral vessels tone: short constriction is followed by dilatation. It is one of the most disabling conditions in the world, currently ranked as the 7th leading cause of disability [1]. Head pain or headache accounted for 3 % of emergency department (ED) visits annually and was the fourth or fifth leading reason for patients to visit the ED [2]. The prevalence of migraines or severe headache is 15.3 %, with 20.7 % prevalence in women and 9.7 % prevalence in men [3]. Migraines affect people’s quality of life and ability to participate in work, family, and social event [4]. Migraines are classified as with or without aura. Migraines with aura have fully reversible sensory, visual, or other symptoms related to the central nervous system. The aura usually begins before migraine onset but may occur with headache onset or after the headache has stopped. The most common type of aura in patients with migraine is visual aura, followed by sensory disturbances, and, less frequently, speech disturbances [3, 4]. Drugs used for the treatment of an acute migraine attack are ergot alkaloids and its derivatives,

triptans, methylxanthine derivative, non-steroid antiinflammatory drugs (NSAIDS), antiemetics as adjuvant agents. For migraine prophylaxis, drugs from the groups of beta-adrenal blockers, anticonvulsants, as well as botulinum toxin type A - hemagglutinin complex and monoclonal antibodies (mAbs) to calcitonin gene-related peptide (CGRP) or its receptors. Drugs from the group of antidepressants are used as second choice drugs and angiotensin II receptor antagonists. There are 3 newly monoclonal antibodies approved in development for migraine treatments such as Erenumab, Fremanezumab, and Galcanezumab [2].

Goal

To study structure of hospitalized patients with migraine attacks and their treatment.

Material and method of research

The retrospective analysis of medical records of 14 patients with migraine attacks who were treated in the neurology department of Gomel regional hospital for the period from 2020 year to 2022 was carried out. All patients were diagnosed on the basis of complaints, medical history, physical examination, and instrumental diagnostic methods such as magnetic resonance imaging (MRI). Depending on the sensory, visual or other symptoms related to the central nervous system, there are two main clinical forms: with aura and without aura. According to frequency also we can classify migraines into rare, moderate and frequent attacks. Results of the MRI investigations were considered such as present of foci of pathological changes in the substance of brain and without any pathological changes.

The results of the research and their discussion

Patients with migraine attacks were found to be presented by 5 males (35.7 %) and 9 females (64.3 %). Their age ranged from 25 to 48 years ($Me = 42.5 \pm 7.9$). The age distribution of patients is shown in Table 1. Distribution of patients according to clinical forms is presented in Table 2.

Table 1 – Distribution by age

Age (years)	20–29	30–39	40–49
No of patients	2 (14.3 %)	4 (28.6 %)	8 (57.1 %)

Table 2 – Distribution by clinical forms and gender

Sex	With aura	Without aura
Male – 5 (35.7 %)	0 (0.0 %)	5 (100.0 %)
Female – 9 (64.3 %)	2 (22.2 %)	7 (77.8 %)

Based on the above, the frequency of hospitalizations increases at the age of 40 to 49 years. Also according to the sex distribution, a higher incidence of migraine is noted in women, which agrees with the literature data. The study also revealed that the most common form of migraine is the form without aura.

Patients were classified according to attack frequency in Table 3. Distribution of patients according to MRI conclusion is presented in Table 4.

Table 3 – Classification according to frequency

Frequency	Rare	Moderate	Frequent
Number of patients	3 (21.4 %)	8 (57.2 %)	3 (21.4 %)

Table 4 – Distribution of patients according to MRI conclusion

MRI conclusion	With pathological changes	Without pathological changes	MRI not done
Number of patients	7 (50.0 %)	5 (35.7 %)	2 (14.3 %)

The most common type of frequency is moderate attacks Half of the patients (50 %) were with pathological changes of single solitary supratendrial foci of gliosis of vasogenic nature.

Figure 1 shows a pie chart depicting the different drug groups patients received in the hospital with their percentages. Figure 2 shows different drug groups recommended at discharge with their percentages.

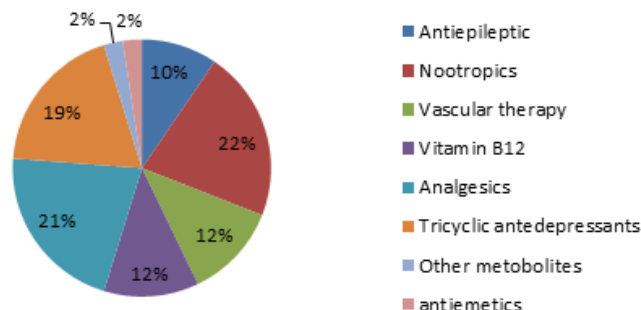


Figure 1 – Different drug groups given for the migraine attack in the hospital with their percentages
Most common drug type received in hospital treatment is nootropics (22 %).

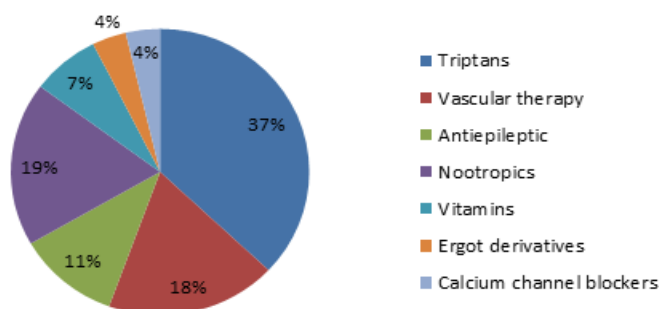


Figure 2 – Different drug groups recommended at the discharge with their percentages

The most common type of drugs recommended at discharge of patients is triptans with 37 %.

Conclusion

All patients diagnosed with migraine were of working age. The most common type of clinical form is migraines without aura. Migraine attacks are more prevalent among women. In most cases migraine attacks with moderate frequency and with pathological changes were seen. In order for the treatment of attacks and prevention of future attacks a combination therapy is often used. At the same time, during inpatient treatment, nootropics, which are not recommended drugs in the therapy of migraine patients, were the most frequently used drugs. Nevertheless, in the recommended treatment at home, triptans come first, which corresponds to the clinical recommendations.

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