

ASSESSMENT OF QUALITY OF LIFE IN PATIENTS WITH ABUSE HEADACHE

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ABSTRACT

In this study, various scales and questionnaires are used to assess quality of life and work productivity in patients with abuse headache, which are considered primary headaches. Even today, there are various theories regarding the origin and development of headache, however, the importance of migraine and tension headache as the primary headache in the development of abuse headache and more research is needed to determine its significance. In such cases, it is necessary to study the clinical and neurological features of abuse headache arising from primary headache.

Key words: migraine, tension type headache, quality of life, questionnaires, abuse headache.

INTRODUCTION

Ergotamine, the drug that causes drug abuse headache (also known as abuse headache), was first used to describe headaches brought on by analgesics and other substances in the 1988 edition of the International Classification of Headache Disorders. Headache secondary to painkiller abuse is defined by this classification. (5)

Worldwide, 3 billion people experience different types of headaches (4). Since most patients with abusos headaches are of working age (11), it's critical to preserve patients' quality of life while also preventing and treating the condition. New approaches have been developed to do just that.

The change from primary to chronic headaches is one of the primary causes of abuse headaches. The term "abuse headache" refers to headaches that last 15 days or longer per month and frequent overuse of painkillers for at least three months (6).

According to studies, the majority of people who experience chronic migraines—nearly three-quarters of them—overmedicate. The fact that patients took painkillers without a prescription or supervision from a doctor is the most significant finding.

In research on the genesis of abuse headaches, patients with primary headaches—particularly migraine and tension headaches that progress to a chronic form—undoubtedly hold a central position. Furthermore, patients with post-traumatic headache, among others, may experience secondary headache pain.

Worldwide, the prevalence of abuse headaches varies between 0.5% and 7.2%; however, this number is subject to change over time as a result of evolving diagnostic standards. (12) The majority of cases are seen in middle-aged, working women (M:F 1:3–4), but 'rigi' headaches also affect 21% to 52% of children with chronic headaches and 35% of adults over 64. Patients who have rickets are also observed to have this condition. (2)

Low socioeconomic status, low level of education, frequent headaches, obesity, consumption of large amounts of caffeine or sudden cessation of caffeine intake, sleep disturbances, stressful events, depression, anxiety disorder (1). In 2012, the frequency of abuse headache was three times higher than migraine and ten times higher than TTH, based on 27 data from a special study carried out in Europe to identify different types of headache (7). The International Classification of Headache Disorders, Third Revision (ICHD-3) diagnostic criteria, a thorough collection of complaints, and medical history are the foundation for the diagnosis of abuse headache (6): A headache that a patient with a history of headaches experiences for at least 15 days out of every month.

B. Consistent misuse of one or more drugs for the treatment of headache symptoms or to relieve an acute attack over a duration longer than three months. C. Does not more closely align with another ICHD-3 diagnosis. Maintaining a headache journal, where the patient records the frequency, severity, and accompanying symptoms of headache attacks, as well as the names, dosages, and frequency of headache medications taken, is one of the most useful techniques for diagnosing abuse headache.

Purpose: Assessment of pain intensity, drug dependence and work efficiency in patients with abuse headache.

APPROACHES: From 2022 to 2024, a study of outpatient patients receiving treatment was carried out in the city of Tashkent, Republic of Uzbekistan. Every patient who was examined willingly consented to take part in the research.

The following standards were applied in the selection of study participants.

1. Patients in group 1 must be between the ages of 18 and 45.
2. Individuals who abuse migraine-induced headaches

Selection criteria for group 2:

1. Patients are 18-45 years old.
2. Patients with abuse headache caused by tension-type headache disease

The following patients were excluded from the study:

1. Women who are expecting or nursing
2. Individuals with severe somatic illnesses that coexist
3. Individuals suffering from epilepsy
4. Individuals suffering from illnesses like substance abuse, alcoholism, and mental illness
5. Individuals with organic brain disorders

The Recruitments of Subject

Fifty patients with abuse headaches from migraines and fifty patients with abuse headaches from tension-type headaches were observed throughout the study. The International Headache Society's 2013 diagnostic criteria (ICHD-3) were used to diagnose abuse headache during the study. Both groups' abuse headache-causing factors were taken into account.

Diagnostic standards for headache abuse:

Abuse headache criteria according to the International Headache Classification:

A. When patients with chronic headache report headaches occurring at least 15 days per month in their anamnesis; B. When one or more medications that are taken for more than three months are regularly abused to treat acute or symptomatic headaches; C. When ICHD-3 is not better explained by another diagnosis; D. Subclasses of abuse headache:

1. Frequent consumption of ergotamine abuse headache medication for over 10 days per month for a period of three months;
2. Triptan abuse headache, which results from taking one or more triptans in any formula on a regular basis for longer than ten days per month for a period of three months;

3. Taking nonopioid analgesic abuse-related headache medication (NSAIDs, ASA, or other) on a regular basis for more than 15 days per month for three months;

4. Opioid analgesic abuse headache resulting from habitually consuming one or more opioids for more than ten days per month for a period of three months;

5. Abuse headache – brought on by overusing combination analgesics, which involves taking one or more of them frequently for longer than ten days a month for a period of three months;

6. Abuse headache resulting from the misuse of multiple drug classes that are not taken separately; this involves taking any combination of the aforementioned drugs on a regular basis for more than 10 days a month for three months without abusing any particular drug or class;

7. Consistently abusing one or more drugs in excess of the recommended dosage for the treatment of abuse headache, which is an acute or symptomatic headache brought on by abusing other drugs for ten days per month.

The diagnostic complex for patients with abuse headache in both groups is as follows:

- MRI or CT scans of the brain;
- clinical and neurological examinations
- scale LDQ
- VASh scale for evaluating headache intensity
- HALT-90 index scale
- Mc Gill questionnaire

Analytical Statistics

The statistical analysis was carried out with the aid of GraphPad Prism 7. Microsoft Excel was used to analyze the gathered data. The acquired data were displayed as percentages, standard deviations, and average values. The significance level for a statistical threshold is * $r < 0.05$, ** $r < 0.01$, *** $r < 0.001$, and *** $r < 0.0001$.

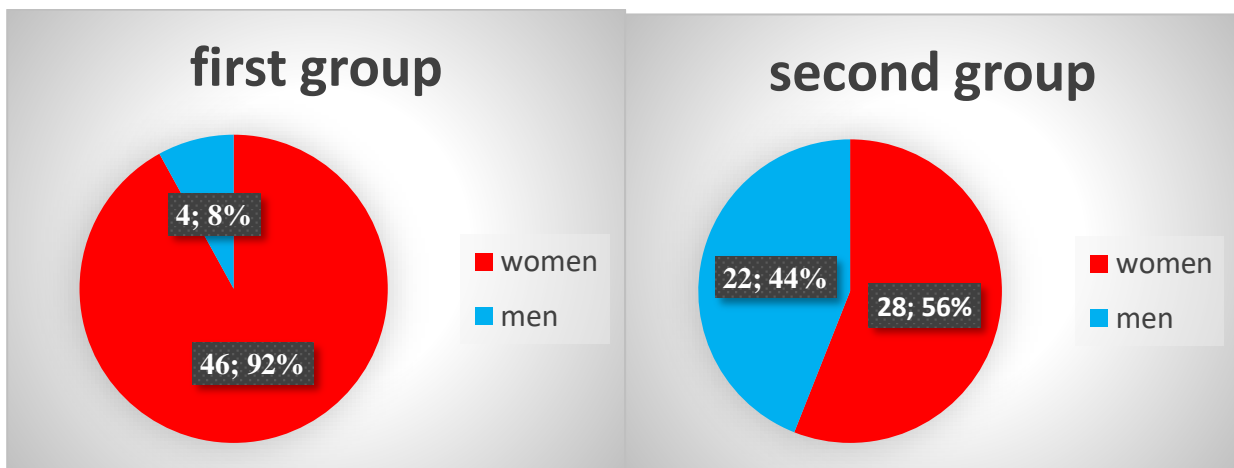
OUTCOME

The average age of the patients in the study is between 18 and 45. Table 1 displays the distribution of patients' ages and genders who were part of the study.

Table 1

Demographics of the migraine headache patients and the tension headache group:

		% of patients with abuse headache due to migraine (n=50)	% of patients with abuse headache due to tension headache (n=50)
Sex	Women %	92 % (46)	56 % (28)
	men %	8 % (4)	44 % (22)
Age at time of examination	men %	25,25±3,2	29,41±8,33
	Women %	36,28±7,25	33,89±5,08



10% of the total (in 10 patients) based on mental activity. Table 2 shows the distribution of each gender in the groups.

Table 2

In patients with abuse headache from migraine and abuse headache from tension-type headache, group data according to mental activity:

		% of patients with AH due to migraine (n=50)	% of patients with AH due to tension headache (n=50)
Gender	males %	2% (1)	12,5% (4)
	females%	10% (5)	0% (0)
Overall		12% (6)	12,5%(4)

Table 3

Pain intensity on the VASH scale, time lost due to headache on the HALT scale, and LDQ scale were significantly higher in patients with migraine-induced AH and tension-type headache-induced AH. Information on drug addiction assessment:

	Patients with migraine-induced abuse headache (n=50)	Patients with abuse headache due to tension-type headache (n=50)
VASH scale	8,6±1,47	7,625±1,13
HALT-90 scale	23,35±14,82	18,45±4,8
LDQ scale	13,0±7,6	17,06±5

Table 4

Multidimensional McGill Pain Intensity Questionnaire

diagnosis	Indicators according to the McGill questionnaire				
	Index of number of selected descriptors (M±80)		Rank pain index (M±8B)		Evaluative scale (M±80)
	Sensory	affective	sensory	Affective	
abuse headache from migraine	7.5±0.5	5,1±0,4"	15,2±1,7"	10,1±0,7"	4,5±0.1
Total	12,6 ±0,9		25,3±2,4		
abuse headache from Tension type headache	6,4±0,3^	4,8±0,1^	13,6±0,7^	8,1±0,2^	3,1±0.1
Total	11.2±0,4		21,7±0,9		
There is statistical significance in the differences. # - p<0.05 contrast between tension-type headache and migraine					

Severe headache was noted in both patient groups based on the VASH scale. It has been confirmed that the pain is stronger in patients with abusing headache caused by migraine. According to the HALT-90 scale, the level of severity 3 in abuse headache caused by tension headache is determined and requires preventive treatment. In abuse headache caused by migraine, patients with severity level 4, it has been found to require medical attention.. According to the LDQ scale, both groups were found to be moderately dependent on drugs.

Pain assessment according to the McGill questionnaire showed (Table 4) abuse headache from migraine (affective index of the number of selected descriptors 5.1 ± 0.4 ; affective pain rank index 10.1 ± 0.7 ; evaluative 4.5 ± 0.1). The affective rating of abuse headache from migraine pain was the highest. The “mildest” according to the patients’ self-assessment was abuse headache from TTH (sensory index of the number of selected descriptors 6.4 ± 0.3 ; sensory pain rank index 13.6 ± 0.7 ; evaluative 3.1 ± 0.1) with an affective component (affective index of the number of selected descriptors 4.8 ± 0.1 ; pain rank index affective 8.1 ± 0.2)

DISCUSSION

Based on the findings of long-term research carried out by headache experts in global centers of expertise, the presence of abuse headache was found in the majority of headache patients. Studies of pathophysiological mechanisms consistently reveal different processes associated with the abuse of analgesics in headache syndromes. However, the amount of data is still limited and requires further research (9). The absence of specific pathognomic clinical aspects or clinical biomarkers in the diagnosis of abuse headache requires careful formulation of its diagnostic criteria. Therefore, the emergence of new evidence in the future may require a revision of this criterion. (3).

First, an assimilative approach to pain management was associated with higher medication need and higher levels of anxiety about medication tolerance and withdrawal symptoms. Second, attempts to manage pain, need for medication, and concerns about pain relievers were positively related (8)

Other secondary causes of headache may include medication overuse, which may also cause headaches. Therefore, we emphasize that abuse headache activity should be critically evaluated for each patient. For this, a careful approach to the clinical and neurological characteristics of abuse headache and a clinical examination focused on neurological deficits are required.

CONCLUSION

As a result, we can conclude that there's a good chance that migraines are the source of abuse headaches. Women experience abuse headaches more frequently. In working age, abusive headaches are more prevalent. Those who do not perform mental labor are more likely to experience abuse headaches. Existing patients with abuse headaches have worse quality of life and perform worse on a daily basis at work. When it comes to abuse headaches caused by migraines, patients experience more intense pain than those caused by tension.

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