RelationShip Between Personality Disorders and Migraine Headache in Referral Patients to Ardbil Neurology Clinic, 2013-14

Ghasem Fattahzadeh-Ardalani, Hamidreza Azizzadeh

‘Department of Surgery, Ardabil University of Medical Science, Ardabil, Iran; ‘General practitioner, Ardabil Azad University of Medical Science, Ardabil, Iran.

Abstract: Some problems related to migraine as one of the most common causes of headache is caused by psychiatric disorders associated with it. Understanding relation between personality disorders with migraine headache can be effective in the diagnosis and treatment of migraine.

Aim: The aim of this study was to investigate the association between personality characteristics and migraine incidence in neurology clinic in Ardabil during 2013-14.

Methods: In this descriptive-analytical study, 50 migraine patients were selected randomly. In order to determine personality disorders, MCMI-3 questionnaire was used. Collected data analyzed using statistical methods in SPSS.16.

Results: Of all patients, 62% were female and 38% were male with the mean age of 37.02 years old (range 18-65). The personality disorders that observed among patients by the highest frequency order were histrionic personality disorder (70%) and obsessive (40%). The prevalence of depressive personality disorder among women (P = 0.020) and the prevalence of narcissistic personality disorder higher among men (P = 0.049) were significantly higher than others.

Conclusion: Results showed that people with migraines have certain personality characteristics such as anxiety, irritation, depression, anxiety, and obsession that these characteristics leads into internal frustration and cause to headache and finally lead to migraine headache.

Key Words: Personality disorders, Headache, Migraine

Introduction

Migraine is one of the most common causes of headache which implicated about 15 percent of women and 6 percent of men [1]. A Migraine is an attacking headache which its occurrence not certainly clear, but it seems that patients with migraine have abnormalities in sensory information processing whose centers are in the brainstem [2-3]. To find out the underlying dysfunction in migraine, one of the methods is to assess the associated diseases. Previous studies suggest that migraine is associated with psychiatric diseases [4-10]. Investigation of the relationship between migraine and psychiatric disorders is useful in the treatment of people with migraine and select the best treatment. Many studies have been done on the effects of biological, environmental, psychological and social factors on migraine attacks among the patients. Psychological problems are prevalent among patients with migraine and most of them with chronic migraine headaches are depressed [11]. Lipton and et al in a study showed a clear and meaningful correlation between introvert personality traits, depression and hypochondriasis with chronic migraine headache. Although it is not clear yet whether psychological factors are the causes of headache or not [12]. Wilson and et al in a study showed that the prevalence of psychological symptoms among individuals with migraine is 2.5 times more than other people [13]. According to Kaplan and Sadouk idea, two-thirds of patients with migraine have obsessive-compulsive personality traits and are idealistic and aggressive and they may be suffer from headache after emotional stresses [14]. Several studies have
shown stress and depression can cause starting and repeating of migraine attacks [4,15]. Given the high prevalence of migraine and psychiatric disorders and the importance of them, as well as the lack of adequate research on the prevalence of them in Iran, there is a need to do more research in this area. The aim of this study was to investigate the relationship between personality disorders and migraine headache in patients referred to neurologic clinic of Ardabil city in 2014.

**MATERIALS AND METHODS**

In this descriptive-analytical study, 50 patients with migraine were selected randomly from the patients referring to neurology clinic of Alavi Hospital in Ardabil city. In order to determine personality disorders in these patients, MCMI-3 personality questionnaire was used. The collected data were analyzed using statistical methods in SPSS version 16 software.

**RESULTS**

Of the total patients, 19 patients (38%) were male and 31 (62%) were female. The mean age of the subjects in the present study was 37.2 ± 13.2 (range 18-65). Most of patients were in the age group 30 to 39 years old (28%). The most observed disorder in all patients with migraine was histrionic personality disorder (35.7%) which was the most frequency in both sexes, but the order of other personality disorders was different between two sexes. The prevalence of depression among women was significantly more than men, and the prevalence of narcissistic personality disorder among men was significantly more than women. (Table 1)

**DISCUSSION**

In this study, the prevalence of migraine among women with 62% was higher than men (38%). According to the study of Tazikiand et al, [16] and Firoozabadi and et al, [17], the prevalence of migraine in women was more than men. The mean age of the subjects in the present study was 37.2 ± 13.2 and the patients were in the age range of 18 to 65 years old. This finding was consistent with the findings of other studies [16-17]. Three personality disorders, which have the highest frequency among migraine patients in the present study, were as follows: histrionic personality disorder (70%), obsessive-compulsive personality disorder (40%) and depressed personality disorder (36%). Patients with histrionic personality disorder need a lot of attention and praise, and they behave in an exhibitive and community friendly manner to have their peace of mind supplied. They behave in a flattering and very obediently manner. They are pretentious, pathetic and probably in search of stimulation, excitement, and attention. They simply react to stimuli around them and often highly motivated, but motivation does not last long and the pattern of arousal and relaxation are constantly repeated. These people, in spite of their values and beliefs, in order to protect their mental security, avoid conflicts and disagreements with others [18]. In terms of behavior, patients with OCD are serious, consistent, conscientious, polite, regular, accurate, punctual, often perfectionist, upright, conservative, strongly agree and submit to the law, honest, self-made and hardworking. They have much control over their behaviors and actions. In terms of emotional, they are prevented. They suppress their anger and hate and control their emotions and they rarely present their feelings and emotions. They are socially compatible and consistent with the group and, as a result, they have commitment to a set of behaviors and rigid rules and repetitive and monotonous way of life. They fear from social disapproval and they are models of courtesy and restraint in their communities. To avoid criticism, they try not to make mistakes. Their behaviors stem from a conflict between the feeling of hostility, which they want to present, and the fear they have from social disapproval [18]. Depressed patients are often grim, stern, pessimist, serious, quiet and passive and are easily distracted with negative events. They often feel bad and have a low self-esteem. They tend to have undue inconvenience and worry. However, they are usually responsible and conscientious and they are self-criticize because of the smallest errors. They are often depressed and they do not seem happy even in the most pleasant experiences. They feel that their efforts to improve their relations or any other important aspect of their lives are useless. This is due to the fact that persistent pessimism leads them to have a failure perspective. Their soulless behavior often makes others away from them. These patients constantly feel guilty because they are very dependent on others to gain the support and acceptance. They also have difficulty in expressing their anger and often swallow their anger. These people, inspite of depressed mood and negative thoughts, do not consider themselves depressed. This personality style may occur even in the absence of clinical depression. Cold treatment and soulless behavior in combination with passivity and self-doubt may put them in occupational and marital problems. Also, if they are under stress due to the lack of loved ones, they will probably suffer from dysthymic [18]. In the study conducted by Wolf and et al, it was noted that migraine patients are rigid, obsessive, idealistic and ambitious and aggressive[19]. Tarain et al. study showed that migraine patients are generally uncertain, hesitant, idealistic, detail-oriented and are sensitive to criticism. According to the report, these people don’t have close and deep communications [20]. In another study [21] that has been done by the MMPI test on 80 patients with migraine showed that migraine patients had higher scores on scales of
paranoia and introversion compared with the control group. Comparing the two groups of men and women participating in the study, it was found that the prevalence of depressive personality disorder among women was significantly higher and the prevalence of narcissistic personality disorder was significantly higher among men. The results of a study conducted by Rezaian et al. showed that disruption of social relationships and physical, hysteria and obsessive-compulsive occur more in women with migraine headaches and depression and anxiety are more obvious in men with migraine headaches [22]. In a study conducted by Karakoram on the personality characteristics of 35 patients with acute migraine and 50 patients with chronic migraine, the results showed that depression and anxiety may be a risk factor in the onset of migraine and depression, hysteria and hypochondriasis in patients with chronic migraine are more specific and more obvious than in acute migraine [23]. According to the studies of Kaplan and Sadouk, two-thirds of migraine patients have aggressive, oppressive and obsessive-compulsive personality traits and their headaches are aggravated by worry and anxiety [14]. The study conducted in 1990 on 80 patients with acute and chronic migraine showed that the most common psychiatric disorders observed in patients with migraine were anxiety and depression [24]. In a study conducted by Martin and et al. on 652 students with migraine headaches showed a clear relationship between migraine and features of OCD, anxiety, depression and anxiety [25]. The results of a study on 70 patients with tension and migraine headaches revealed that the scales of violence and aggression in patients with migraine without aura were significantly higher than normal patients. In this study, the scales of anxiety and depression in patients with tension and migraine headaches with aura were more than the control group [26].

**CONCLUSION**

The results showed that histrionic, obsessive-compulsive and depression personality traits in patients with migraine headaches were more common than other patients. Given that migraine headache is a multifactorial disease, undoubtedly hereditary, psychological and social factors play roles in its occurrence and intensity. Thus, it is suggested for the researchers to evaluate the effect of cognitive-behavioral interventions in patients with migraine.

Also, due to the limited population of this study to the migraine patients in Ardabil city and more generalize the results, future studies with larger sample sizes and control groups in different parts of the country are recommended.

<table>
<thead>
<tr>
<th>p-value</th>
<th>percent</th>
<th>total</th>
<th>women Mean score</th>
<th>men Mean score</th>
<th>Sex</th>
<th>Personality disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.85</td>
<td>70</td>
<td>35</td>
<td>81.7</td>
<td>22</td>
<td>Dramatic</td>
<td></td>
</tr>
<tr>
<td>0.81</td>
<td>40</td>
<td>20</td>
<td>74.8</td>
<td>12</td>
<td>Morose</td>
<td></td>
</tr>
<tr>
<td>0.02</td>
<td>36</td>
<td>18</td>
<td>91.4</td>
<td>15</td>
<td>Depressed</td>
<td></td>
</tr>
<tr>
<td>0.11</td>
<td>20</td>
<td>10</td>
<td>89.5</td>
<td>4</td>
<td>pessimist</td>
<td></td>
</tr>
<tr>
<td>0.41</td>
<td>16</td>
<td>8</td>
<td>80.7</td>
<td>6</td>
<td>Dependent</td>
<td></td>
</tr>
<tr>
<td>0.049</td>
<td>14</td>
<td>7</td>
<td>76.1</td>
<td>2</td>
<td>Narcissistic</td>
<td></td>
</tr>
<tr>
<td>0.12</td>
<td>12</td>
<td>6</td>
<td>75</td>
<td>2</td>
<td>Aggressive</td>
<td></td>
</tr>
<tr>
<td>0.11</td>
<td>8</td>
<td>4</td>
<td>73.6</td>
<td>4</td>
<td>Avoidance</td>
<td></td>
</tr>
</tbody>
</table>

**Conflict of Interest:** none-declared

**ACKNOWLEDGEMENT**

Authors acknowledge the immense help received from the scholars whose articles are cited and included in references of this manuscript. The authors are also grateful to authors / editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.