INTRODUCTION

Pain has been one of the most unsettling and draggy findings since mankind existed. Vegetative indications such as chronic pain, sleeplessness, loss of appetite in the company of psychological and physical strain might cause social and economical issues by showing decrease in the functionality and the daily life activities [1]. When asked to the women applying to the hospitals for any reason, it was reported that 75% of them had the least mild level of mastalgia [2]. The term of Mastalgia was first used by Viennese surgeon Bilroth in order to define mastalgia [3]. In the premenstrual period, mild cyclical mastalgialasting for 1-4 days is considered to be normal. On the other hand, mild or severe level chronic mastalgia lasting for over 5 days can be defined as mastalgia [4, 5]. It was reported that only half of women had applied to a physician due to mastalgia, in addition, only 5 % of these women had been examined by a specialized breast clinic [6, 7] mastalgia, in general, is a chronically progressing disease. It is known that there is a close relationship between the existance of chronic pain and somatization [8, 9]. In the studies carried out, it was determined that 12 % of the chronic pain suffering patients and 17 % of the irritable bowel syndrome suffering patients had the somatization disorders [10]. In our country, in the study carried out with the university students, a positive relationship was found between chronic pain and the existance of the disease and somatization disorder [11]. No study researching the existance of somatization in the mastalgia patients has been reached both in the national and international literature. The aim of this study was to assess the somatization symptoms in patients with mastalgia.

MATERIALS AND METHODS

This research is a cross-sectional study designed for collecting qualitative and quantitative data. The universe of the study consisted of 680 mastalgia patients who applied to the general surgery department between February 2012 and February 2013. A telephone survey was conducted to determine the study sample. 116 patients admitting to the General Surgery Breast Clinic of Adana Numune Education and Research Hospital from 15 February 2012 to 15 February 2013 with unilateral or bilateral breast pain for at least six months without any organic disease or menstrual cyclic disorders were enrolled to the study.
The control group included 105 healthy volunteers. The two groups were adjusted for age, educational and marital status. Written informed consent was obtained from all participants. Ethics Committee approval were taken from Numune Education and Research Hospital. Research carried out on humans in compliance with the Helsinki Declaration. Hamilton Anxiety Scale (HAM-A), Beck Depression Inventory (BDI), Symptom Checklist Revised-90 (SCL-90-R) and Somatization Dissociation Scale (SDQ) were used to assess the psychiatric symptoms of the patients and control group.

Collection of the study groups

The exclusion criteria were as follows: Having; a palpable mass in breast examination, signs of skin or nipple indicating malignancy, signs of inflammation suspicious nipple discharge, rapid growth in the breast, cystic or solid mass diagnosed in the breast via scanning techniques (mamography or ultrasonography), current or previous psychiatric disorder, pregnancy, presence of referred pain, medical treatment with steroid or hormon, mastopathy, breast via scanning techniques (mamography or ultrasonography), current or previous psychiatric disorder, pregnancy, presence of referred pain, medical treatment with steroid or hormon, mastopathy, breast inflammation suspicious nipple discharge, rapid growth in the breast, cystic or solid mass diagnosed in the breast via scanning techniques (mamography or ultrasonography), current or previous psychiatric disorder, pregnancy, presence of referred pain, medical treatment with steroid or hormon, mastopathy, breast examination.

Social demographic data form

This form drills into the demographic data of the patient and collects information about his/her age, gender, marital status, level of education.

Hamilton Anxiety Scale (HAM-A)

This scale which was developed by Hamilton comprises 14 items prepared to define the level of anxiety and the dissemination of symptoms, and also to measure the variation of the amplitude of these findings [12]. The presence and amplitude of the findings are evaluated by the interviewer. Each question is valued with a score of 1-4, and then the total sum is calculated. A total sum of 0-5 points indicates that no anxiety is present, while 6-14 points indicate minor anxiety (low-mild), and 15 points or more indicate major anxiety [13]. The Turkish validity and reliability study was conducted by Yazici et al. in 1998 [14].

Beck Depression Inventory (BDI)

This inventory was first developed by Aaron T. Beck in 1961, and revised in 1971 [15]. It was translated to Turkish by Hisli in 1989, and its validity and reliability were proved [16]. The BDI is a self-assessment scale comprising 21 items, and it validates the depressive symptoms and characteristic approaches. Each item contains 4 choices which are scored from 0 to 3. A total of 0-6 points are achieved from the sum of the 21 items, and any increase in the score indicates an increase in depressive symptoms. The cut point for the Turkish population is accepted as 17 [17].

Symptom Checklist Revised-90 (SCL-90-R)

A psychiatric symptom is a measurement and survey tool analyzing the difficult situation the individual was stuck in or the level of the negative stress reaction that the individual had. A test result coming out of the definition of mild anxiety. Beck Depression Inventory (BDI), Symptom Checklist Revised-90 (SCL-90-R) and Somatization Dissociation Scale (SDQ) were used to assess the psychiatric symptoms of the patients and control group.

RESULTS AND DISCUSSION

The mean age of the study group was 30.55±7.78 years while that of the control group was 31.25±7.35 years (p>0.05). The mean educational period of the patient group was 8.74±2.71 years and it was 8.34±2.80 years in the control group (p>0.05). 94 (81%) of the study group and 81 (77%) of the control group were single (p>0.05) (Table 1).
Table 1: Socio-demographic characteristics of the study and the control groups

<table>
<thead>
<tr>
<th></th>
<th>Mastalgia Group (n: 116)</th>
<th>Control Group (n:105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30.55±7.78</td>
<td>31.25±7.35</td>
</tr>
<tr>
<td>Mean Educational</td>
<td>8.74±2.71</td>
<td>8.34±2.80</td>
</tr>
<tr>
<td>Marital status</td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Married</td>
<td>22 (19%)</td>
<td>24 (23%)</td>
</tr>
<tr>
<td>Single</td>
<td>94 (81%)</td>
<td>81 (77%)</td>
</tr>
</tbody>
</table>

The score of Beck Depression Inventory (BDI) for the study group was 7.98±4.19 and it was 7.39±4.65 for the Control Group (p>0.05). The score of HAM-A for study group was 9.57±4.55 and it was 8.97±5.66 for the Control group (p>0.05). The results of HAM-A concluded that minimal level of anxiety is for both groups in the study (Table 2).

Table 2: The average and standard deviation and statistical analysis of HAM-A subscales and BDI of the Study and the Control Groups

<table>
<thead>
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<th>Control Group (n:105)</th>
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</thead>
<tbody>
<tr>
<td>HAM-A</td>
<td>19.48±9.55</td>
<td>20.71±10.68</td>
</tr>
<tr>
<td>BDI</td>
<td>8.58±5.69</td>
<td>8.63±5.54</td>
</tr>
</tbody>
</table>

While there was no significant difference between the groups in terms of obsession-compulsion, interpersonal sensibility, depression, anxiety, rage, phobic anxiety, paranoid ideation, and psychoticism subscales of SCL-90-R, there was significant difference in the somatization subscales (p<0.001). The SDQ scale were also significantly different between the Study and Control Groups (respectively 30.02±7.50; 22.74±4.01) (p<0.001) (Table 3).

Table 3: The average and standard deviation and statistical analysis of SCL-90 subscales and SDQ of the Study and the Control Groups

<table>
<thead>
<tr>
<th></th>
<th>Mastalgia Group (n: 116)</th>
<th>Control Group (n:105)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL-90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somatization</td>
<td>2.12±0.87</td>
<td>0.91±0.55*</td>
</tr>
<tr>
<td>Obsession-Compulsion</td>
<td>0.84±0.10</td>
<td>0.81±0.16</td>
</tr>
<tr>
<td>Interpersonel Sensibility</td>
<td>0.90±0.11</td>
<td>0.71±0.14</td>
</tr>
<tr>
<td>Depression</td>
<td>1.01±0.20</td>
<td>0.86±0.11</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.97±0.19</td>
<td>0.89±0.12</td>
</tr>
<tr>
<td>Rage</td>
<td>0.96±0.17</td>
<td>0.96±0.33</td>
</tr>
<tr>
<td>Phobic Anxiety</td>
<td>0.93±0.14</td>
<td>0.72±0.92</td>
</tr>
<tr>
<td>Paranoid Ideation</td>
<td>0.89±0.21</td>
<td>0.76±0.08</td>
</tr>
<tr>
<td>Psychoticism</td>
<td>0.87±0.17</td>
<td>0.71±0.12</td>
</tr>
<tr>
<td>SDQ</td>
<td>30.02±7.50</td>
<td>22.74±4.01*</td>
</tr>
</tbody>
</table>

*p<0.001 between Mastalgia and control group

While pain is a accompanier symptom in most physical illnesses, mastalgia is one of the illnesses in which pain is the most important indication. Determined in previous studies that psychological troubles in the mastalgia patients were able to be defined clinically, they are most frequently defined as common anxiety disorders and major depression [25]. In previous years, whereas mastalgia patients were reported to have been defined as direct psychoneurotic people, when it came to the treatment condition that the mastalgia patients had for a long time and no result was achieved, it was reported that the scores of anxiety and depression had raised [26] and psychiatric symptoms such as minor and major depression were determined to have been at a high level [27]. In the illnesses that have constant pains like mastalgia, the anxiety symptoms such as motor strain, the state of anxiety, alarmism and instant irritation can frequently be seen in the person. In the studies carried out, regardless of cyclic mastalgia or serious-resistant mastalgia, it was shown that the stress perception of the patients was higher than that of the patients who had no mastalgia complaint and they were prone to the psychiatric illnesses like panic distortion [2, 27]. One of the preeminent illnesses through which the term ‘pain’ passes in the DSM-IV and ICD-10 systems is somatization disorder. The relationship between Mastalgia and Somatization were evaluated in few medical journals [27, 28]. In this research, in the mastalgia patients who no organic ethiology was determined, somatization findings and levels were found high in accordance with the normal ones. Somatization is seen more frequently in traditional and
pre-modern agricultural societies. The etiology of the disease has genetic, learning and socio-cultural factors, psychodynamics factors, stressor and overcoming assembly. In addition, it is known that the words defining the emotions in the historical development of the languages went through certain phases. There are no words telling of the psychological lives in the languages of many primitive societies and the emotions are generally told through somatic findings [11].

The manifestation of the emotions by means of symbolic body language can cause somatization [29, 30]. In the study carried out by Colegreva et al. who discussed the existence of somatization in the mastalgia patients, it was argued that these patients had more frequently anxiety and depression, less frequently pain and somatization symptoms [25]. The anxiety and depression values of the patients participated in our study were found indifferent from those of the patients in the Control Group. On the other hand, the score of SCL-90 somatization subscale displayed the existence of somatization distortion qualitatively and quantitatively. In addition, SDQ score according to the Control Group was found high in support of these results.

CONCLUSION
Our results suggest that it should be kept in mind that the existence of psychiatric symptomatology in the mastalgia patients should not only be limited to the depression, but also the existence of other psychiatric illnesses. All these findings might indicate that mastalgia patients need a multi-discipline approach including psychiatric treatment. Mastalgia patients applied for general surgery clinics must be demanded for psychiatric consultation.

Acknowledgements
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REFERENCES
20. Nijenhuis ER, Spininhoen P, Van Dyck R, Van der Hart O, Vanderlinden J; Psychometric characteristics of the Somatoform Dissociation...


