INTRODUCTION

Temporomandibular joint pain dysfunction syndrome is the second most frequent cause of facial pain. The objective of this study was to find out most common etiological factor of TMD, its clinical symptoms, and distribution among gender. Etiology was multifactorial. All patients (100%) with TMD were having malocclusion and stress (100%). Third most common factor was increased pain threshold (37%). Out of 160 patients 82 (51%) were females and 78 (48%) were males. Most patients were between 20-30 years of age group 51/160 (31.8%). Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females.

Key Words: Pain dysfunction syndorm, frequency.

ABSTRACT

Temporomandibular joint pain dysfunction syndrome is the second most frequent cause of facial pain. The objective of this study was to find out most common etiological factor of TMD, its clinical symptoms, and distribution among gender. Etiology was multifactorial. All patients (100%) with TMD were having malocclusion and stress (100%). Third most common factor was increased pain threshold (37%). Out of 160 patients 82 (51%) were females and 78 (48%) were males. Most patients were between 20-30 years of age group 51/160 (31.8%). Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females.

Key Words: Pain dysfunction syndorm, frequency.

TMD can be difficult to manage, and since the disorder transcends the boundaries between several health-care disciplines — in particular, dentistry and neurology, the treatment may often involve multiple approaches and be multidisciplinary. The natural history of TMD is benign and self-limiting, with symptoms slowly improving and resolving over time. The prognosis is therefore good.6

The current study was conducted to find out the risk factors most commonly associated with TMD to know the gender predilection, age group and effects of TMD in patients who visited the pain clinic in Nishter Institute of Dentistry, Multan.

METHODOLOGY

One hundred and sixty consecutive patients of TMD from Jan 2012 to June 2013 presented at Nishter Institute of Dentistry Multan diagnosed clinically and radiographically were included in this descriptive study. A detailed history was obtained regarding types, severity of symptoms, duration and site of pain was noted to reach the diagnosis. All patients (100%) were having malocclusion and stress (100%). Third most common factor was increased pain threshold (37%). Out of 160 patients 82 (51%) were females and 78 (48%) were males. Most patients were between 20-30 years of age group 51/160 (31.8%). Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females.

Key Words: Pain dysfunction syndorm, frequency.
to answer all the questions. An informed consent was taken about the questionnaire.

RESULTS

Out of 160 patients 82 (51%) were females and 78 (48%) were males. Most patients were between 20-30 years of age group 51/160 (31.8%).

Etiology was multifactorial. All patients (100%) with TMD were having malocclusion and stress (100%). Third most common factor was increased pain threshold (37%).

Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females. Details can be seen in Tables 1-4.

DISCUSSION

Temporomandibular pain dysfunction syndrome is very common in our society among adults and females. Most of patients in this study were between age 20-30 and females. This is the finding consistent with the studies of Licini which showed the prevalence of temporomandibular disorders (TMD) higher among women than men, indicating a multifactorial role for gender-related differences in the etiology of TMD, physiological hormonal differences, inflammatory response to stress, and sociocultural differences in response to pain. Gender-related differences may be considered risk factors for TMD; psychological characteristics, including somatization, depression, and anxiety related to gender, appear to have a significant impact on the prevalence of TMD.

All patients in the current study were having malocclusion and stress (100%). Stress was also most common factor in one study done by Rai. In his study 15 patients out of 24 exhibited TMD having high salivary cortisol and melamin levels. Pizolato also concluded that stress and open lips were associated with TMD in children.

Deep bite was most common causative factor present in the current study followed by crowding, carious and missing teeth and then cross bite. Sipilä showed edentulousness, wearing of complete dentures and poor condition of dentures associated with pain-related TMD findings among women.

Clenching was the causative factor in the current study in 12.5% of patients. Dawson also showed in his study that tooth clenching was associated with TMD. But Yaduv worked on subjects comprising of 260 females and 240 males in the age group of 18-55 years and showed a limited association between the severity of attrition and TMJ dysfunction.

Köhler study included 100 individuals which show the prevalence of muscle pain and temporomandibular joint pain. Gender differences were noted in these changes overtime. Female gender, advancing age, awareness of bruxism, self-perceived health impairment and the wearing of complete dentures were associated with TMD signs. Feraz evaluated temporomandibular joints tomographically, and found tomographic alterations in joints out of which 25 (83.3%) patients were clinically diagnosed with TMD. And only 5 (16.7%) were clinically diagnosed with osteoarthritis/arthrosis. But in the current study no patient was having degenerative joint disease.

Most common presenting symptom in the current study was pain followed by clicking sounds in joint and then limited mouth opening in this study. Pimenta study also showed facial pain was reported by 85% of the TMD group, and 77.5% were diagnosed with myofascial TMD. Muscle pain during jaw movements, daytime bruxism/clenching, and limited mouth opening were significantly higher.

In this study all sign and symptoms were present more in females. Schmid also showed significantly higher pain intensity for females than for males. Clinical assessment showed a significantly lower degree of mouth opening for females than for males. While no gender specific differences were noted for clicking phenomena of the temporomandibular joint (TMJ) and for the bite class of the patients, bite anomalies were significantly more frequent in male patients in his study.

Bagis studied 243 consecutive patients and showed, on palpation of masticatory muscles and the TMJ revealed significantly higher tenderness on palpation in female as compared to male. With a frequency of 92%, pain in the temporal muscle was the most common

<table>
<thead>
<tr>
<th>Age range (in years)</th>
<th>Males (n)</th>
<th>%</th>
<th>Females (n)</th>
<th>%</th>
<th>Total No. of patients (n)</th>
<th>% Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-20</td>
<td>12</td>
<td>7</td>
<td>21</td>
<td>13</td>
<td>33</td>
<td>20</td>
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<tr>
<td>20-30</td>
<td>33</td>
<td>20</td>
<td>18</td>
<td>11</td>
<td>51</td>
<td>31.8</td>
</tr>
<tr>
<td>30-40</td>
<td>12</td>
<td>7</td>
<td>28</td>
<td>17</td>
<td>40</td>
<td>25</td>
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<td>40-50</td>
<td>15</td>
<td>9</td>
<td>9</td>
<td>5.6</td>
<td>24</td>
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<td>50-60</td>
<td>6</td>
<td>3.7</td>
<td>3</td>
<td>1.8</td>
<td>9</td>
<td>5.6</td>
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<tr>
<td>60-70</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1.8</td>
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<td>1.8</td>
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</table>
Temporomandibular pain dysfunction syndrome

The most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females between 20-30 years of age.

CONCLUSION

Temporomandibular pain dysfunction syndrome is more common in females between 20-30 years of age. Etiology is multifactorial. Most common factor was malocclusion and stress. Most common presenting symptom was pain followed by clicking sounds in joint and then limited mouth opening. All these symptoms were more common in females.

REFERENCES