DEMOGRAPHIC DATA CONCERNING SPINAL CORD INJURY INCIDENCE THAT ARE UNDERTAKING TREATMENT AT THE MEDICAL REHABILITATION HOSPITAL BÂILE FELIX

ALINA CARMEN MATICA¹, FELICIA CIOARĂ², CARMEN NISTOR CSEPENTO³, LIVIU LAZÂR⁴

¹Bâile Felix Medical Rehabilitation Hospital, ²,³University of Oradea

Keywords: spinal cord injury, incidence, demographic data

Abstract: The purpose of the paper is to present the demographic data obtained following a cohort type, descriptive, comparative, with prospective elements study, and to correlate it with the data from the specialty literature. Material and method. 80 patients from Bâile Felix Medical Rehabilitation Hospital were included in the study, patients who were diagnosed with spinal cord injury (SCI), and evaluated before and after 6 months of recovery treatment. Results and conclusions. We notice that the origin environment is not so significant, but on the other hand, age is an important factor, the maximum incidence being between 21-40 years old (41.25), which correlates with the SCI causes, that is car accidents (58.75%), falls from heights (20.00%) and water jumps (10.0%).

INTRODUCTION

Spinal cord injury represents a major event in the life of an individual (1,2), and the recovery involves physical adaptations as well as social ones, with the purpose of gaining a maximum degree of functional independence, of reintegration in the social and family life and of having a quality of life as high as possible.(3)

The main three causes of the spinal cord injury, according to the specialty literature (4,5,6), are: motor vehicle accident (42.9%), falls (20.9%) and violence (17.8%). Other causes are represented by: leisure sports activities, motor accidents and medical complications.(3,7,8)

Along time, several scales of evaluating the severity of the spinal cord injury were proposed, in order to be able to have an estimation of the functional prognosis of the trauma victim patients. These scales may be divided in two large groups: scales that evaluate the neurological deficit secondary to the trauma and scales that evaluate the residual functioning capacity of self care, of accomplishing daily activities, etc.(1,4,9)

Spinal cord injury makes the individual subject to a higher risk of psychological disorders.(10)

The psychological effects arising may be: personality change, emotional disorders (depression, a drop in motivation and self esteem, emotional instability), anxious disorders (anxiety, panic attacks, post trauma stress), somatoform disorders, and sometimes even atrophy of the cognitive system.

PURPOSE

The purpose of the paper is to present the demographic data obtained following a cohort type, descriptive, comparative, with prospective elements study, and to correlate it with the data from the specialty literature.

METHODS

80 subjects who were diagnosed with spinal cord injury were included in the study, and they were evaluated before and after 6 months of recovery treatment.

RESULTS

The demographic data obtained after evaluating the study group points out the following:

1. According to the origin environment, it turns out that incidence is slightly higher in the urban environment, the proportion urban/rural being of 1.1:1.

Table no. 1. The distribution of the cases according to the origin environment

<table>
<thead>
<tr>
<th>Environment</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>38</td>
<td>47.50</td>
</tr>
<tr>
<td>Urban</td>
<td>42</td>
<td>52.50</td>
</tr>
</tbody>
</table>

Figure no. 1. The distribution of the cases according to the origin environment

2. The age group concerned is represented in table no. 2.

Table no. 2. The distribution of the cases according to the age

<table>
<thead>
<tr>
<th>Age</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20 years old</td>
<td>7</td>
<td>8.75</td>
</tr>
<tr>
<td>21-30 years old</td>
<td>33</td>
<td>41.25</td>
</tr>
<tr>
<td>31-40 years old</td>
<td>22</td>
<td>27.50</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>13</td>
<td>16.25</td>
</tr>
<tr>
<td>&gt;50 years old</td>
<td>5</td>
<td>6.25</td>
</tr>
</tbody>
</table>

Average age 33.01±7.68

Corresponding author: Alina Carmen Matica, Str. Col. Buzoianu, Nr. 29, Oradea, România, E-mail: matica.alina@yahoo.com, Phone: +40751 236263

Article received on 14.11.2014 and accepted for publication on 15.12.2014

ACTA MEDICA TRANSILVANICA March 2015;20(1):55-57
We notice that most of the cases were between 21-40 years old (41.25%), the average age being 33.01 years.

3. In the studied group, the proportion men/women being of 2.2:1, the incidence of Vertrebo-medullary trauma (VMT) is practically double among men (68.75%), just as figure no. 2 shows:

4. According to the motor deficit resulted as a consequence of SCI, the diagnosis of paraplegia is present in 66.25% of the cases, and 33.75% presented tetraplegia.

5. Out of the 80 patients of the study, 18 cases had the diagnosis of complete injury, and 62 cases had incomplete injury.

6. In the graphic below we have presented the duration of the injury for the patients included in the study. Over 50% of them had an injury that was 2-4 years old (52.50%), the average duration being of 2.75 years.

7. The causes of spinal cord injuries met in the present study are represented in table no. 5.

Table no. 5. The distribution of the cases according to the pattern of incidence of the injury

<table>
<thead>
<tr>
<th>Type of injury</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work accident</td>
<td>4</td>
<td>5.00</td>
</tr>
<tr>
<td>Car accident</td>
<td>47</td>
<td>58.75</td>
</tr>
<tr>
<td>Sport accident</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Violence</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Projection from a higher level</td>
<td>2</td>
<td>2.50</td>
</tr>
<tr>
<td>Fall</td>
<td>16</td>
<td>20.00</td>
</tr>
<tr>
<td>Explosion</td>
<td>1</td>
<td>1.25</td>
</tr>
<tr>
<td>Water jump</td>
<td>8</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Almost 60% of the patients suffered a car accident (58.75%), falls represented 20.00%, and water jumps 10.0%.

8. Concerning the need of surgical intervention, 90% of the patients needed one, the rest of 8 cases underwent a conservatory treatment.

CONCLUSIONS

We notice that the origin environment is not so significant, but on the other hand, age is an important factor, the maximum incidence being between 21-40 years old (41.25), which correlates with the VMT causes, that is car accidents (58.75%), falls from heights (20.00%) and water jumps (10.0%).

The data obtained in the present study confirm the increased incidence of car accidents, just like in the specialty literature (42.9%) and of the falls from heights.

The deeds of violence met in this study are met to a much lesser degree, 3.75% compared to 17.8% described in literature.

Other causes met in the study were: leisure sports activities, explosion, work accidents.
The study shows a proportion men/women of 2.2:1, meaning an incidence of VMT, practically double among men (68.75%).

REFERENCES

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