THE EVOLUTIVE MODALITY OF THE PSYCHIC DISORDERS DEVELOPED IN PATIENTS WITH CEREBROVASCULAR DISEASE

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INTRODUCTION

Medical studies have revealed the coexistence of the cerebrovascular disease (CVD) and the mental disorders. This connection is based on a cause-result relationship and the possibility of randomness is excluded. Associating a neurological diagnosis with a psychiatric one is a very frequent practice, and this was initially proved by the clinical observation and then statistically demonstrated through several epidemiological studies. The research conducted into the topic led to results relatively close to the observation that the incidence of mental disorders associated with CVD is higher with men. A series of research papers tried to emphasise and explain the causes which determined this link between the neurological and the psychiatrical pathology, mainly focusing on the topography of the cerebral lesions.

THE AIM OF THE PAPER

The purpose of this paper is to determine the incidence of psychic disorders among the patients with CVD, the topographical and temporal correlation of CVD and its psychopathology, as well as the evolution of the psychic manifestations. As the gender-based differences regarding the incidence of mental disorders at patients with CVD have already been proved and generally accepted as a fact, this research paper sets out to emphasise some clinical particularities, especially the etiopathogenical ones, of the psychic manifestations in CVD; these particularities are typical to the two sexes and to the topography of the lesion as well.

MATERIAL AND WORK METHOD

The present research paper belongs to the category of prospective studies. The sample group consisted of a number of 110 cases selected from the inpatients of The Neurology Clinic of Sibiu, in 2009-2010, who needed assessment or long-term psychiatric treatment after the debut of CVD. The selection criteria for the sample group were: 1. diagnosis of ischemic or hemorrhagic stroke; 2. diagnosis of psychic disorder (according to DSM IV TR and ICD 10) which appeared immediately after the stroke or within up to a six month time; 3. the absence of any diagnosis of psychic disorder before the beginning of the stroke; 4. the absence of a psychic disorder caused by a medical condition; 5. the absence of a psychic disorder induced by the use of medical substances.

RESULTS

The age span of the patients was between 20 and 80 years of age. From the total number of the cases we studied in 2009-2010, there were 48 women and 62 men. It was noticed that the number of men with cerebrovascular disease outruns the number of women with the same pathology (56.3% men, 43.6% women); the ratio of men to women is 1:2.9, a significantly comparable result to the data presented by the acknowledged studies in the field. This ratio reveals that the risk factors are more numerous with the male patients (physical work, consumption of toxic substances, ignorance of the maladies subjacent to the cerebrovascular disease) (see Table no. 1). The research showed that the age group most frequently affected is...
CLINICAL ASPECTS

70-79 years of age (38.16% of the total number of women and
32.25% of the total of men). Also, the number of male patients
with cerebrovascular disease is larger than the number of
women belonging to the same 60-69 age group. Regarding the
group between 20 and 39 years of age, the cases are very rare.
There were only two male subjects with this pathology (1.81% of
the total number of cases). The evolution of the socio-
economic phenomena in the period 2007-2010 seems to be
closely connected to the data presented above as the socio-
professional environment has changed for this category of
patients. We cannot establish that schooling is an independent
factor which influences the beginning of the cerebrovascular
disease; it is closely correlated with the occupation, and this
implies exposing the patients to the same risk factors from the
urban or rural environment (see Fig.1).

Table no. 1. Distribution of the sample group by age and sex
groups

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Women (n=48)</th>
<th>Men (n=62)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of cases</td>
<td>%</td>
<td>No. of cases</td>
</tr>
<tr>
<td>20-29</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>30-39</td>
<td>0</td>
<td>0%</td>
<td>2</td>
</tr>
<tr>
<td>40-49</td>
<td>3</td>
<td>6.25%</td>
<td>4</td>
</tr>
<tr>
<td>50-59</td>
<td>8</td>
<td>16.66%</td>
<td>10</td>
</tr>
<tr>
<td>60-69</td>
<td>10</td>
<td>20.83%</td>
<td>15</td>
</tr>
<tr>
<td>70-79</td>
<td>18</td>
<td>37.50%</td>
<td>20</td>
</tr>
<tr>
<td>80-89</td>
<td>9</td>
<td>18.75%</td>
<td>11</td>
</tr>
<tr>
<td>90+</td>
<td>0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100%</td>
<td>62</td>
</tr>
</tbody>
</table>

Figure no. 1. The graphical repartition of the sample group
according to the socio-professional categories

An important parameter on which we focused was the
etiopathogeny of strokes. From this perspective, we identified
17 patients with hemorrhagic stroke (15.45%) and 93 patients
with ischemic stroke (84.54%). Seven out of the total number of
patients suffering from a hemorrhagic stroke were women and
ten men. The subgroup of the patients suffering from ischemic
stroke was represented by 51 male patients and 42 female
patients. The topography of the lesions led us to the following
observations: 45 patients had lesions at the parietal lobe
(40.90%), 38 cases (34.54%) with lesions at a temporal level, 19
patients with lesions at the frontal lobe (17.27%) and 8 patients
with occipital lesions (7.27%), (see Fig.2).

Our results are in accordance with the data offered by the
acknowledged studies in the field at a great extent, the
parietal lobe being the one that generates the most frequent
strokes (40.9% of the group, that is 45 subjects), whilst the least
frequent strokes are generated by the occipital lobe (7.27%,
that means 8 patients).

The psychic manifestations that could be observed and
diagnosed during the research bring together various clinical
tableaux, which vary from paroxysmal to permanent disorders,
with differentiated expressions according to the cerebral lobes
that were affected.

Sixty-eight patients had paroxysmal psychic manifestations
(see Fig. 3).

Although, from a strictly numerical point of view, it

Table no. 2 The distribution of the patients according to the
period in which the psychic disorders developed

<table>
<thead>
<tr>
<th>Psychic manifestations</th>
<th>Patients</th>
<th>Absolute number</th>
</tr>
</thead>
<tbody>
<tr>
<td>De novo (debut after 30 days)</td>
<td>8</td>
<td>17.39</td>
</tr>
<tr>
<td>Transitory (10 days)</td>
<td>10</td>
<td>21.73</td>
</tr>
<tr>
<td>Paroxysmal (72 hours)</td>
<td>28</td>
<td>60.86</td>
</tr>
<tr>
<td>Permanent (Total)</td>
<td>46</td>
<td>100.00</td>
</tr>
</tbody>
</table>

It can be noticed that the permanent psychic disorders
take various forms at the beginning, with manifestations typical
to some paroxysmal or acute psychopathological clinical
tableaux.

In order to keep the relevance of the research intact,
the patients who presented permanent psychic disorders, but
were also to be found in the category of the paroxysmal and
transitory psychic disorders, were counted only in the category
of the permanent psychic disorders. The patients who suffered
from both transitory and paroxysmal psychic disorders were
taken into account only in the first category, which means a total
number of 12. The category of paroxysmal psychic disorders
was represented by the patients who did not show any
psychiatric symptom after 72 hours.

Therefore, out of the 110 patients, 26 had paroxysmal
psychic disorders, 12 patients developed transitory psychic
disorders, 46 patients revealed permanent psychic disorders
and 26 patients did not show any psychic symptoms according to the
observation sheets (Fig. no. 3).

Figure no. 3. The graphical representation of the general
psychic disorders in the sample group

<table>
<thead>
<tr>
<th>Paroxysmal psychic disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitory psychic disorders</td>
</tr>
<tr>
<td>Permanent psychic disorders</td>
</tr>
<tr>
<td>No psychiatric symptoms</td>
</tr>
</tbody>
</table>

AMT, vol II, nr. 2, 2011, pag. 207
can be concluded that the paroxysmal and transitory psychic disorders prevail, it is a false conclusion because a significant part of these are nothing else but debut modalities of the permanent psychic disorders; there are only 17.39% cases which begin after 30 days; the remaining cases embody paroxysmal and acute clinical tableaux.

**DISCUSSIONS AND CONCLUSIONS**

The paroxysmal psychic disorders assemble various psychiatric signs and symptoms such as: dysmnesia, perception and thinking disorders, corporeal scheme disorders (frequently), confusion, anxiety, sadness, psychomotor agitation. The symptoms were encountered at 68 patients of the group (61.81%), but the variety and the differences in intensity, the polymorphism, the abrupt debut and the short period of time do not allow them to be labeled from a syndromological point of view or to be quantified. The signs and symptoms belonging to this category evolved towards transitory psychic disorders at 42 patients. There were only 8 patients whose psychic manifestations started after 72 hours. The transitory psychic disorders formed clinical tableaux of: light cognitive disorder (2 patients), amnestic syndrome (3 patients), organic hallucinosis (one patient), organic anxious disorder (2 patients) and organic delirium (4 patients). Some paroxysmal and transitory psychic disorders evolve into permanent psychic disorders represented by: organic personality disorder (13 cases), dementia (15 cases), organic depression (10 patients) and organic anxiety (8 cases). The final observation is that the way in which the latter nosological categories begin is varied and they frequently derive from the metamorphosis of the paroxysmal and transitory psychic disorders.

**REFERENCES**

2. *Baban A. Strategii și metode de cercetare calitativă: Interviul și observația, în cogniție, creier, comportament*, Cluj-Napoca; 2000, nr. 3-4;

*AMT, vol II, nr. 2, 2011, pag. 208*