PECULIARITIES OF CLINICAL MANIFESTATIONS OF CHRONIC CEREBRAL ISCHEMIA

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To determine and evaluate subjective and objective manifestations in patients with chronic cerebral ischemia, depending on the genesis of its development. Materials and Methods: Were studied subjective and objective symptoms in 237 patients with chronic cerebral ischemia (CCI). Depending on the pathogenesis of development, all patients were divided into 2 groups: 1 group - consisted from 115 (48.5%) patients with CCI on the background of hypertensive disease, 2 group - 122 (51.5%) patients with CCI on the background of cerebral atherosclerosis. Results: There were significant differences in subjective symptoms of patients with CCI of hypertensive genesis and those with CCI of atherosclerotic genesis, while there were no differences in their objective symptoms. Conclusions: Differences in the clinical symptomatology of psychoneurological disorders in patients with CCI of atherosclerotic and hypertensive genesis have been revealed, which must be taken into account when conducting therapeutic and prophylactic measures.
Relevance. In recent years, the structure of cerebral vascular diseases is changing due to the growth of ischemic forms [1,3,5]. This is due to an increase in the proportion of arterial hypertension and atherosclerosis, as the main cause of cerebrovascular pathology [1,3,6]. One of the central places in the study of cerebrovascular pathology belongs to the problem of chronic cerebral ischemia (CCI) [2, 4, 5, 10]. The earliest and most common manifestation of chronic cerebral ischemia (CCI) is cognitive impairment [3,8]. So, according to A.B. Lokshina and N.N. Yakhno, cognitive disorders are present in almost 90% of cases already in the I-II stage of CCI [6,9]. In this case, violations of cognitive functions are a sufficiently reproducible symptom of CCI, that is, in repeated studies they have the same manifestations, even if the studies are carried out by different specialists [2,5]. This is a significant difference in the violations of cognitive functions from other objective neurological symptoms of early stages of CCI, the reproducibility of which is small. Therefore, at the present time there is a firm belief that it is the identification of disorders of cognitive functions characterized by a number of specific features that has the greatest diagnostic value in patients with CCI [1,4,7].

Purpose of the study: to determine and evaluate subjective and objective manifestations in patients with chronic cerebral ischemia, depending on the genesis of its development.

Material and methods of the study. The clinical-neurological examination was performed in 237 patients with CCI. All patients were divided into 2 groups. 1 group consisted from 115 (48.5%) patients with chronic cerebral ischemia, which developed mainly against the background of hypertensive disease. Group 2 included 122 (51.5%) patients with chronic cerebral ischemia, which developed mainly on the background of cerebral atherosclerosis. According to the classification of AH according to the level of blood pressure in accordance with the recommendations of the Russian Society for Arterial Hypertension and the All-Russian Scientific Society of Cardiology (3rd revision, 2008), we divided the patients of group 1 into 3 subgroups: AH - I degree (SBP 147.5 ± 1, 6 mm Hg, DBP - 93.4 ± 1.1 mm Hg, pulse - 85.0 ± 0.8 beats per minute) was detected in 53 patients (42.7%), AH-II degree (SBP - 163.1 ± 1.5 mm Hg, DBP - 100.4 ± 1.6 mm Hg, pulse - 88.6 ± 1.1 beats per minute.) - in 56 (45.2%), AH-III degree (SBP - 184.7 ± 4.8 mmHg, DBP - 110.7 ± 3.6 mmHg, pulse - 88.9 ± 3.4 beats per minute) in 15 (12.1%) patients.

Results and its discussion. The main, more frequently presented subjective complaints among the patients examined were: headache, dizziness, noise in ears, decreased memory and attention, emotional disturbances, decreased working capacity.

In the analysis of complaints, it was found that 112 (97.4%) patients of the 1st and 98 (80.3%) - the 2nd group (P <0.001) had headache, dizziness of non-systemic nature was observed in 99 (86 , 1%) patients 1 st and 72 (59.0%) - 2 nd group (P <0.001). Sleep disorders were met respectively in 94 (81.7%) and 69 (56.6%) patients (P <0.001). Noise in the ears were noted by 48 (39.3%) patients of the 2nd and 87 (75.7%) patients of the 1st group (P <0.001).105 (91.3%) patients of the 1st and 85 (69.7%) patients of the 2nd group (P <0.001) complained of fatigue, 103 (89.6%) and 94 (77, 0%) of the examined patients complained to decreased working capacity (P <0.05). A decrease in memory was observed in 110 (95.7%) patients of the 1st and 97 (79.5%) - the 2nd group (P <0.01), decreased attention in 109 (94.8%) and 92 (75.4%) patients respectively (P <0.001) (Table 1).

Subjective symptoms were reliably more frequent in patients of the 1st group, whose headaches were more often localized in the occipital region with the appearance of a compression sensation, lumbent or dull pain, faintness or nausea, nonsystemic dizziness, darkening in the eyes, «black flies» before the eyes, blanching skin integument. All these symptoms indicate a spasm of the arteries, that is, an increase in the tone of the arterial walls, in which local ischemia and tissue hypoxia occur. In the development of such a headache, not only the spasm of the walls of the arteries plays a role, but also the concomitant edema of the vascular tissue and ischemic tissue hypoxia (secondary (vascular) headache).

Of all subjective complaints, the most common was headache, in connection with which we conducted her assessment according to the VAS scale (Table 2).
Subjective symptoms in the examined patients

<table>
<thead>
<tr>
<th>Complaint</th>
<th>1 group (n=115)</th>
<th>2 group (n=122)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>abs.</td>
<td>%</td>
<td>abs.</td>
</tr>
<tr>
<td>Headache</td>
<td>112</td>
<td>97,4±1,5</td>
<td>98</td>
</tr>
<tr>
<td>Dizziness</td>
<td>99</td>
<td>86,1±3,2</td>
<td>72</td>
</tr>
<tr>
<td>Sleep disorders</td>
<td>94</td>
<td>81,7±3,6</td>
<td>69</td>
</tr>
<tr>
<td>Noise in ears</td>
<td>87</td>
<td>75,7±4,0</td>
<td>48</td>
</tr>
<tr>
<td>Decreased memory</td>
<td>110</td>
<td>95,7±1,9</td>
<td>97</td>
</tr>
<tr>
<td>Fatigue</td>
<td>105</td>
<td>91,3±2,6</td>
<td>85</td>
</tr>
<tr>
<td>Decreased working capacity</td>
<td>103</td>
<td>89,6±2,9</td>
<td>94</td>
</tr>
<tr>
<td>Decreased attention</td>
<td>109</td>
<td>94,8±2,1</td>
<td>92</td>
</tr>
</tbody>
</table>

The analysis showed that in patients of the 1st group, the pain syndrome according to the VAS is 7.2 ± 0.1 points, in the second group - 4.8 ± 0.1 points (P <0.001). It turned out that in patients with CCI of hypertensive genesis, i.e. in patients of group 1, the pain syndrome according to the VAS was more pronounced, which is associated with an increase in blood pressure.

The central paresis of the VII pair of cranial nerves was observed in 93 (80.9%) patients of the 1st and 98 (80.3%) - the 2nd group. The central paresis of the XII pair of cranial nerves was met respectively in 86 (74.8%) and 92 (75.4%) patients. Anisoreflexia was observed in 83 (72.2%) patients of the 1st and 86 (70.5%) - the 2nd group. Decrease in convergence, accommodation weakness were found in 80 (69.6%) patients of the 1st and 88 (72.1%) - the 2nd group. Reflexes of oral automatism were observed respectively in 96 (83.5%) and 107 (87.7%) patients. The instability in the Romberg pose was diagnosed in 89 (77.4%) patients of the 1st and 102 (83.6%) - the 2nd group. Intention in the finger-nasal test was found in 76 (66.1%), and intention at the heel-knee test was in 42 (36.5%) patients of the 1st group. In 82 (67.2%) patients of the 2nd group, intention was observed in the finger-nasal sample, and in 31 (25.4%) patients with intention at the heel-knee test.
CONCLUSIONS

1. Significant differences in subjective symptoms such as headache, dizziness, decreased attention and memory, as well as irritability and fatigue, are found in patients with CCI of hypertensive genesis compared with CCI of atherosclerotic genesis.

2. It can also be noted a faster rate of increase in psychoneurological disorders in patients with CCI of hypertensive genesis, which is associated with an increase in blood pressure.

References


