Clinical Observation on Post-stroke Anxiety Neurosis Treated by Acupuncture

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Objective: To observe the therapeutic effect of acupuncture on post-stroke anxiety neurosis (PSAN).

Methods: 34 patients in the treatment group received acupuncture treatment. Points such as Baihui (GV 20), Shenting (GV 24), Yintang (EX-HN 3), Shuigou (GV 26), Hegu (LI 4), Taichong (LR 3), Shenmen (HT 7) and Neiguan (PC 6) were punctured and supplemented by electroacupuncture. 33 patients in the control group orally took Alprazolam. Hamilton Anxiety Scale (HAMA) was used to evaluate the severity and relief of anxiety.

Results: Anxiety symptoms of the patients in the treatment group were obviously relieved with a total effective rate of 82.35%, and no remarkable difference was found as compared with that of the control group ($P>0.05$).

Conclusions: Acupuncture is a safe, effective and important method for treating PSAN.

Apoplexy (cerebral infarction, cerebral hemorrhage) is a disease with high mortality and disability. Great attention has been concentrated on the emergency treatment of acute stroke and the recovery of the limb functions in medical circles for a long time. The gravity of post-stroke depression, anxiety and other psychological disorders has been realized gradually, and timely diagnoses and treatments for them have been carried out in recent years. The authors have preliminarily made clinical observations on the therapeutic effects of acupuncture on post-stroke anxiety neurosis (PSAN). The result of our research is reported as follows.

**CLINICAL DATA**

All the 67 outpatients or inpatients of the acupuncture department in our hospital from March 2002 to July 2005 conformed to the following standards for inclusion and exclusion. Standards for inclusion: 1) Apoplexy (cerebral infarction, cerebral hemorrhage) was confirmed by cerebral CT and MRI. 2) All the patients conformed to the standards for the diagnosis of ICD-10, FO.64 organic anxiety disorder, and two medical specialists diagnosed their illness as PSAN. 3) Hamilton Anxiety Scale (HAMA) score $\geq 20$, Self-rating Anxiety Scale (SAS) score $\geq 50$. Standards for exclusion: 1) Acute apoplexy within 2 weeks. 2) Disturbance of consciousness, dementia, aphasia and agnea, complications with severe primary diseases of the heart, liver, kidney and hematopoietic system. 3) Severe mental depression, schizophrenia, other mental disorders with drug dependence.

All the patients were randomly divided into 2 groups. Among the 34 cases in the treatment group, 19 were male and 15 female, aged 48-72 years, with their illness courses from 15 to 53 days. Among the 33 cases in the control group, 17 were male and 16 female, aged 49-70 years, with their illness courses from 15 to 61 days. The differences were not significant in sex, age, course of illness, and illness condition between the two groups ($P>0.05$).

**METHODS**

All the patients in both groups were psychologically helped by the physicians who were willing to have careful conversation with them. Patients in the treatment group received acupuncture treatment. No.28 1-1.5 cun filiform needles were used to puncture the main points of Baihui (GV 20), Shenting
(GV 24), Yintang (EX-HN 3) and Shuigou (GV 26), and the adjunct points of Hegu (LI 4), Taichong (LR 3), Shenmen (HT 7) and Neiguan (PC 6). After routine disinfection, the needle was first inserted into Shuigou (GV 26) with needle tip towards nasal septum and heavy bird-peck needling technique was used with the intensity tolerable to the patient. Then, Baihui (GV 20) was punctured in the direction of forehead and Shenting (GV 24) in the direction of Baihui (GV 20) with the twirling-reinforcing method for 1 minute until there was a needling sensation transmission, and then the needles were connected to an electric stimulator (G6805) with dense wave at a frequency of 80-100/min for 30 minutes. Afterwards, Yintang (EX-HN 3), Hegu (LI 4), Taichong (LR 3), Shenmen (HT 7) and Neiguan (PC 6) were punctured with the uniform reinforcing-reducing method. After the arrival of qi, the needles were retained for 30 minutes. The acupuncture treatment was given once a day for 2 courses with 15 times as one course. Patients in the control group orally took Alprazolam in a dose of 0.4-0.8 mg, 3 times a day for 4 weeks before evaluating the therapeutic effects.

Criteria for evaluating the therapeutic effects
After treatment, the therapeutic effects were evaluated according to HAMA scoring system. Cured: The score was reduced by 90-100%. Markedly relieved: The score was reduced by 60-90%. Improved: The score was reduced by 30-60%. Failed: The score was reduced by less than 30%.

RESULTS
The intragroup comparisons showed that there were significant differences in HAMA and SAS scores of both the two groups before and after treatment (P<0.01) but no significant differences were found between the two groups in the intergroup comparisons (P>0.05), see Table 2.

Table 1. Comparison of the therapeutic effects between the 2 groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Cured</th>
<th>Markedly relieved</th>
<th>Improved</th>
<th>Failed</th>
<th>Total effective rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment group</td>
<td>34</td>
<td>5</td>
<td>16</td>
<td>7</td>
<td>6</td>
<td>82.35</td>
</tr>
<tr>
<td>Control group</td>
<td>33</td>
<td>6</td>
<td>16</td>
<td>5</td>
<td>6</td>
<td>81.82</td>
</tr>
</tbody>
</table>

Note: There were no statistical differences in t-test between the 2 groups (P>0.05).

Table 2. Comparison of HAMA and SAS scores before and after treatment in the two groups

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>HAMA score before treatment</th>
<th>HAMA score after treatment</th>
<th>SAS score before treatment</th>
<th>SAS score after treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment group</td>
<td>34</td>
<td>22.31±3.14</td>
<td>15.38±3.20</td>
<td>62.42±7.28</td>
<td>51.66±6.57</td>
</tr>
<tr>
<td>Control group</td>
<td>33</td>
<td>22.27±3.22</td>
<td>14.15±3.46</td>
<td>63.75±6.07</td>
<td>48.83±7.13</td>
</tr>
</tbody>
</table>

In the treatment group, 6 patients were relatively sensitive to acupuncture, but the pain vanished within 5 days and with no side effects. While in the control group, lassitude occurred in 4 cases, dizziness in 2 cases, nausea in 3 cases, poor appetite in 4 cases, constipation in 3 cases and lethargy in 3 cases.

DISCUSSION
PSAN is a severe post-stroke emotional disorder. According to the report, the incidence is 1%-7.5% within the first 1-2 months’ attack. The patients of stroke are often anxious about their future life and work. TCM holds that the focus of stroke lies in the brain, its pathogenesis is associated with wind, phlegm, fire and stasis. PSAN is caused by stagnation of qi and blood, which produces heat, impairs liver-qi and disturbs the mind. The brain is the reservoir of the marrow and in charge of consciousness and
mental activities. The 17th chapter of *Plain Questions* (素问·脉要精微论篇) says: “The head is the residence of intelligence”. Baihui (GV 20) is a point of convergence for all yang meridians, a crossing point of the Governor Vessel and Urinary Bladder Meridian. When Baihui (GV 20) is punctured, yang qi of the whole body can be activated and regulated; Shenting (GV 24) is located at the place where the Governor Vessel converges with the Urinary Bladder Meridian, both the maridians connect with the brain. Therefore, combination of these two points can treat mental disorders, regulate the brain functions, and clear the mind for resuscitation. Shuigou (GV 26) and Yintang (EX-HN 3) are added to refresh the mind and ease mental stress. Since PSAN and mental depression often coexist, it is necessary to use the method of soothing the liver and relieving mental depression in the treatment of PSAN. In this research, Hegu (LI 4) and Taichong (LR 3) are selected to pacify the liver, regulate qi, relieve mental depression and remove stagnation. Shenmen (HT 7), the Yuan-primary point of the Heart Meridian of Hand-Shaoyin, can calm the mind, and Neiguan (PC 6) can relax the chest, ease mental stress and relieve mental depression. Combination of the above-mentioned points can achieve good therapeutic effects.

REFERENCES


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