Psychosomatic Symptoms in Patients With Alopecia Areata and Vitiligo

Abstract: Vitiligo and alopecia areata present an excellent opportunity to focus on the effect of impaired appearance on the lives of the persons with these diseases. Emotional stress has precipitated vitiligo and alopecia areata in some patients.

Twenty-eight patients suffering from alopecia areata and vitiligo and twenty healthy persons at ages between ten and sixty underwent psychological tests of examination with special regard to verification of their psychosomatic symptoms. The results were compared for all groups.

The results revealed that depressive symptomatology in patients with vitiligo and alopecia areata was higher than in the control group (respectively, 55%, 36%, 15%).

As a result, we conclude that the cosmetic disfigurement may be of great importance on the lives of persons with these diseases.

Key Words: Alopecia, Vitiligo, Psychosomatic symptoms.

Introduction

The skin is an important organ, covering and protecting the body against environmental hazards and also providing the connection between the individual and the environment. Some patients with cutaneous symptoms have psychological problems. Skin can react in several ways against emotional factors.

A number of skin diseases are found to be related to emotional factors. Alopecia areata and vitiligo are in this group of diseases (1, 2).

Alopecia areata is a loss of hair with no appreciable abnormality of the underlying skin, ranging in severity from localized patches to universal involvement. The cause of alopecia areata is unknown. Most evidence points toward its being an autoimmune disease modified by genetic factors and acquired by emotional stress (1, 3).

Vitiligo is associated with 4 percent of cases, and there is a positive family history of alopecia in 10 percent of cases of vitiligo (4, 5).

Vitiligo is an acquired disorder in which areas of the skin are completely lacking melanin pigmentation. The cause of vitiligo is unknown, but abnormal neurogenic stimuli, an enzymatic self-destruct mechanism, and an autoimmune mechanism have been postulated as pathogenetic factors (4, 5).

The aim of the present study is to investigate the psychiatric symptomology of alopecia areata and vitiligo.

Materials & Methods

The subject group was composed of 17 alopecia patients and 11 vitiligo patients at the Firat University Faculty of Medicine Department of Dermatology. Of the alopecia patients, 14 had localized and 3 had generalized forms, and of the vitiligo patients, 9 had localized and 2 had generalized forms. Twenty patients were chosen for the control group.

Psychometric values were determined by the Zung Depression Scale and SCL-90-R (Symptom Check List 90-R). Scales were filled out by subjects.

According to the Zung Depression Scale, a score of fifty points or over shows clinical depression levels.

Results were compared with those of the control group, composed of 20 dermatologically and psychiatrically healthy individuals whose demographic features were similar to those of the subject groups. The results were evaluated by unpaired t-test.
Results

The ages of the patients were between 10 and 60. The mean age of the alopecia group was 26.47±12.2, that of the vitiligo was 25.65±7, and that of the control group was 27.09±14.6 years.

Table 1 shows the depression levels of the patients and the control group according to the Zung Depression Scale. Thirty-six percent of the patients with alopecia areata, 55% of the patients with vitiligo, and 15% of the control group manifested depressive symptomatology at clinical levels.

SCL-90 R Scale results and the global severity index value of patients and control group are given in Table 2.

There were significant differences in sub-scale values of interpersonal relationship difficulties, depression, anxiety, phobic reaction, paranoia and global severity index between the alopecia group and the control group, those of the former being higher.

In all variables of SCL-90-R Sub-Scales, there were significant differences between the vitiligo group and the control group, but, exceptionally, in interpersonal relationship difficulties and psychotism variables, there were no significant differences (Table 2).

There were no significant differences in all variables of SCL-90-R Sub-Scales between the alopecia and vitiligo groups.

Discussion

According to the results, patients with alopecia and vitiligo had higher depressive and psychiatric symptoms levels than the control group.

In both groups of patients, although the conditions do not affect physical health of the patients, cosmetic appearance effects their psychological life negatively. Similarly, Porter et al. have reported that many patients are frightened and embarrassed by vitiligo (6). Additionally, several investigators have pointed out the relationship between depressive disorders and psychosomatic skin diseases (2, 7, 8, 9).

In a study by Gürler et al. to investigate the psychiatric symptomatology of Behçet’s disease, psoriasis and alopecia, it was found that the patient group had more severe psychiatric symptomatology than the control group (10).

Although conflicting results have been reported by some authors, emotional stress plays an important role in most of the alopecia areata cases. Some of them accept currently stress as a trigger factor in alopecia (1, 11).

Although the exact etiology of those two diseases is yet known, it is currently believed that immunological mechanisms play an important role (1, 4, 5). Stress affects the immunological mechanism differently. Acute stress triggers immune response temporally. On the other

<table>
<thead>
<tr>
<th>Depression Score</th>
<th>Alopecia</th>
<th>Vitiligo</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>&lt;50</td>
<td>11</td>
<td>64</td>
<td>5</td>
</tr>
<tr>
<td>&gt;50</td>
<td>6</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>100</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 1. Zung Depression Scale Values

<table>
<thead>
<tr>
<th>Sub-Scales</th>
<th>Alopecia mean</th>
<th>Alopecia sd</th>
<th>Vitiligo mean</th>
<th>Vitiligo sd</th>
<th>Control mean</th>
<th>Control sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatisation</td>
<td>0.63</td>
<td>0.61</td>
<td>0.79*</td>
<td>0.53</td>
<td>0.36</td>
<td>0.36</td>
</tr>
<tr>
<td>Obsessive-compulsive features</td>
<td>0.94</td>
<td>0.54</td>
<td>0.90*</td>
<td>0.44</td>
<td>0.59</td>
<td>0.44</td>
</tr>
<tr>
<td>Interpersonal relationship difficulties</td>
<td>1.05*</td>
<td>0.56</td>
<td>0.69</td>
<td>0.36</td>
<td>0.56</td>
<td>0.49</td>
</tr>
<tr>
<td>Depression</td>
<td>0.73*</td>
<td>0.35</td>
<td>0.64*</td>
<td>0.42</td>
<td>0.35</td>
<td>0.40</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.47*</td>
<td>0.36</td>
<td>0.70*</td>
<td>0.27</td>
<td>0.25</td>
<td>0.21</td>
</tr>
<tr>
<td>Hostility</td>
<td>0.80</td>
<td>0.57</td>
<td>0.84*</td>
<td>0.43</td>
<td>0.48</td>
<td>0.44</td>
</tr>
<tr>
<td>Phobic reaction</td>
<td>0.36*</td>
<td>0.39</td>
<td>0.42*</td>
<td>0.33</td>
<td>0.18</td>
<td>0.27</td>
</tr>
<tr>
<td>Paranoia</td>
<td>0.68*</td>
<td>0.41</td>
<td>0.43*</td>
<td>0.38</td>
<td>0.28</td>
<td>0.36</td>
</tr>
<tr>
<td>Psychotism</td>
<td>0.49</td>
<td>0.39</td>
<td>0.48</td>
<td>0.30</td>
<td>0.20</td>
<td>0.24</td>
</tr>
<tr>
<td>Addiction scale</td>
<td>0.68</td>
<td>0.56</td>
<td>0.72*</td>
<td>0.34</td>
<td>0.43</td>
<td>0.32</td>
</tr>
<tr>
<td>Global severity index values</td>
<td>0.68*</td>
<td>0.40</td>
<td>0.67*</td>
<td>0.28</td>
<td>0.36</td>
<td>0.26</td>
</tr>
</tbody>
</table>

* Significant high values comparing with control group p<0.05

| Table 2. SCL-90-R Scales Values |
hand, chronic or uncontrolled psychological stress decreases the immune response in different phases (12, 13, 14, 15).

As a result, we conclude that apart from dermatological examination and treatment, psychiatric consultation and therapy may be helpful regarding vitiligo and alopecia areata.

References