Compliance of adolescents to the treatment of acne vulgaris

Background:
Acne vulgaris is one of the most prevalent dermatological diseases, affecting almost every adolescent in varying extent, symptoms can range from mild to severe. Acne often has a negative influence on self-esteem and confidence among adolescents. Symptoms often require medical treatment for a long time (months to years) which is complex and multiple-stage and includes local and/or systemic medications. The success of the treatment is greatly influenced by the compliance of patients. Adolescents often have poor compliance, and it can be challenging for health care providers to improve compliance in this special age group patients.

Objectives:
The main objectives of our study were to:
• assess the compliance of adolescents and the possible causes of non-compliance
• evaluate the medication-taking habits of patients and the possible side-effects of the local and systemic medications
• explore the possible psychosocial effects of acne vulgaris

Methods:
The collection of data was carried out at the Pediatric Dermatology Outpatient Clinic at the Department of Dermatology and Allergology at the University of Szeged. Adolescents and young adults treated for acne vulgaris were included in the study. After a dermatological examination, an interview was taken with the patients, using a structured questionnaire consisting of 32 questions.

Results I:
213 patients were interviewed, 122 males and 91 females with an average age of 15.63 ± 2.22 years (mean ± standard deviation).

Demography

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-12</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>13-14</td>
<td>4</td>
<td>10</td>
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<tr>
<td>15-16</td>
<td>33</td>
<td>42</td>
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<tr>
<td>17-18</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>19-20</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>21+</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

A significant part of the patients visited the doctor the first time years after the presence of the first symptoms.

Time between the first symptoms occurring and the first visit to the dermatologist

How do the symptoms affect patients’ self-confidence?

Results II:
The most affected part of the body was the face, 85.92% of patients having symptoms on this area. The visible symptoms often had a negative impact on patient's self-esteem, confidence and everyday life. 27.7% of patients thought that acne disturb their everyday activities and social life.

Disease severity

Results III:
A significant number of patients did not follow the dosing and medicine-taking instructions recommended by the doctor. 73.2 % of them applied the local products less frequently, and 56.2 % of them took the medicines less often, than recommended. In order to attempt to achieve a faster remission, a small number of them applied the local treatment more frequently. Due to side-effects, it was necessary to terminate the medication in 9.3% of the cases. According to the patients, 42.5% of them did not return to at least one control visit. 6.7% of the patients did not redeem the prescription for financial reasons.

How often did it happen that the patient applied the topical preparations less frequently or had taken the medicines less often than recommended?

How often did it happen that the patient applied the topical preparations more frequently than recommended?

Conclusions:
In spite of that acne has a significant influence on patient's self-esteem, compliance is not often satisfactory. There are many reasons in the background:
• the complex treatment, which should be used several times a day
• the high price of the products
• the appearance of side effects

Examination and exploration of the factors leading to inappropriate patient compliance can provide important help for improving compliance and the development of an efficient acne treatment system, and in the long run, it can result in the achievement of more successful treatment.

Contact:
Examination ± Contact.