Psychiatric Aspects of the Treatment of Mild to Moderate Facial Acne

Some Preliminary Observations

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Abstract: The improvement of acne appears to be associated with decreased depression and anxiety and greater satisfaction with aspects of body image that are generally unrelated to the appearance of the skin, ie, body shape and weight. The latter emphasizes the profound effect of the appearance of the skin upon the patient's overall body image. Our preliminary findings underline the need for larger controlled studies of psychosomatic factors among patients with mild to moderate acne.

The adverse effect of acne upon the patient's psychological state has been observed by many authors[1–3]; however, most studies have considered patients with severe, generally cystic acne.[4–7] From a clinical perspective, the majority of acne patients have only mild to moderate disease. Therefore, we evaluated some psychiatric factors among a series of patients with mild to moderate facial acne and prospectively examined their relation to treatment.

Materials and Methods

- We studied ten consecutive patients (nine women and one man; age range, 19 to 34 years) with acne who had been recruited by the Dermatology Department at the University of Michigan to take part in a 6-week prospective study evaluating the efficacy of a topical acne treatment (3% erythromycin and 5% benzoyl peroxide gel) for facial acne vulgaris. The study was approved by the Institutional Review Board at the University of Michigan and all patients gave informed consent before entering the study. All patients had used only over-the-counter acne treatments in the past and found them to be ineffective. The inclusion criterion was the presence of 15 or more open or closed comedones or ten or more inflammatory lesions on the face. The exclusion criteria were the presence of six or more cysts on the face, and the use of any systemic or topical treatments for acne during the past month or 2 weeks, respectively.

  All patients underwent a clinical dermatologic assessment before treatment and at the end of 6 weeks of treatment. All patients had an acne severity rating between 2 and 6 on the Cook Scale,[8] a standard acne grading method used throughout this study.

Psychiatric Ratings

Each patient was assessed using semi-structured psychiatric interviews both before treatment and at the end of 6 weeks of treatment. In addition, the patients completed a battery of psychological questionnaires during both time points. The psychological questionnaires included the Brief Symptom Inventory (BSI),[9] the Spielberger State-Trait Personality Inventory (STPI),[10] and the Carroll Rating Scale for Depression (CRSD),[11] which all measure psychopathologic factors, and the Body Dissatisfaction subscale of the Eating Disorder Inventory (EDI),[12] which measures concerns about body shape and weight, dimensions of body image that are generally unrelated to the skin.

Results

The mean (± standard error [SE]) acne severity rating on the Cook Scale[8] for the ten patients was 4.7 (±0.5) before treatment and 2.6 (±0.6) after 6 weeks of treatment, which was consistent with a clinically significant treatment effect.

Psychiatric Findings Before Treatment

According to the clinical interviews, three of the ten patients were clinically depressed[13] and seven of the

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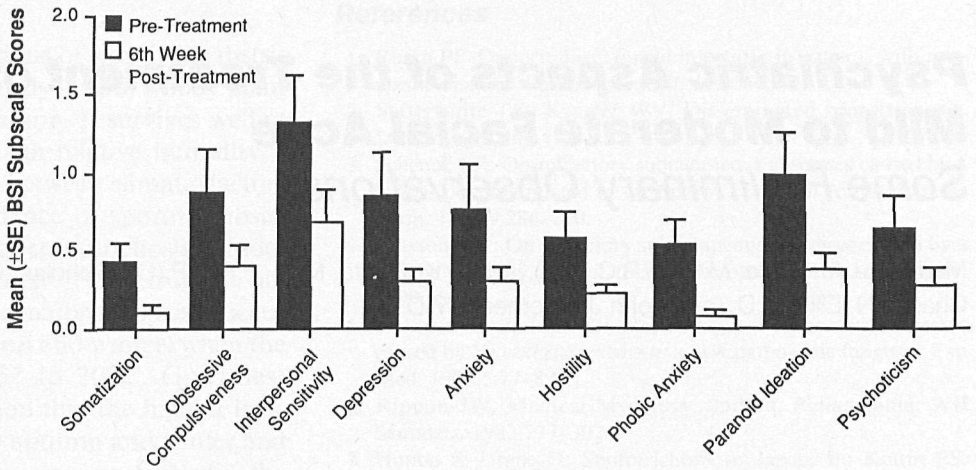

Figure 1. The patients had higher than average scores for Interpersonal Sensitivity (BSI)[9] and marginally high scores for Paranoid Ideation (BSI).[9]

ten patients (including the three above) had a history of a major depressive episode[13] that was exacerbated by the acne-related self-consciousness. Eight of the ten patients were seriously concerned about the effect of acne upon their appearance, and seven patients further believed that they needed to lose weight even though only two of them were clinically overweight.

The most salient pretreatment questionnaire findings were as follows. The patients had higher than average scores for Interpersonal Sensitivity (BSI)[9] and marginally high scores for Paranoid Ideation (BSI)[9] (Fig. 1). Both of these subscales of the BSI measure feelings of uneasiness and/or lack of trust during interpersonal interactions. Four patients had CRSD scores in the depressed range,[11] and three of these four patients also were depressed according to the clinical psychiatric assessment. The mean State-Trait Anxiety (STPI)[10] and Body Dissatisfaction (EDI)[12] scores were higher than the norms for the general population.

Psychiatric Findings After Treatment

According to the clinical interviews, the patients reported an overall improvement in their mental state that they attributed to the improvement in their acne. Only one patient was clinically depressed at 6 weeks, and she was having major interpersonal problems with her boyfriend. All patients reported a decrease in their self-consciousness; they were more satisfied with their general appearance and were less concerned about losing weight by the end of treatment.

The questionnaire ratings after treatment revealed that the mean scores for Interpersonal Sensitivity (BSI)[9] and Paranoid Ideation (BSI)[9] (Fig. 1), State and Trait Anxiety (STPI),[10] and Body Dissatisfaction (EDI)[12] all decreased to the range for the general population norms. One patient had CRSD scores in the depressed range, but she had remained clinically depressed as discussed above.

Comment

Patients with even mild to moderate acne may experience significant psychological distress and body image concerns,[14] as measured by clinical psychiatric interviews and standard questionnaire scores. This is contrary to previous observations that only patients with primarily severe and disfiguring acne experience social anxiety and other psychological problems.[4–7] Interestingly, the patients with less severe acne report psychological symptoms, eg, heightened self-consciousness in social situations, depression, and anxiety, that are similar to those previously reported for patients with more severe or intractable acne.[4–7]

Drug Name

3% erythromycin and 5% benzoyl peroxide gel: Benzamycin

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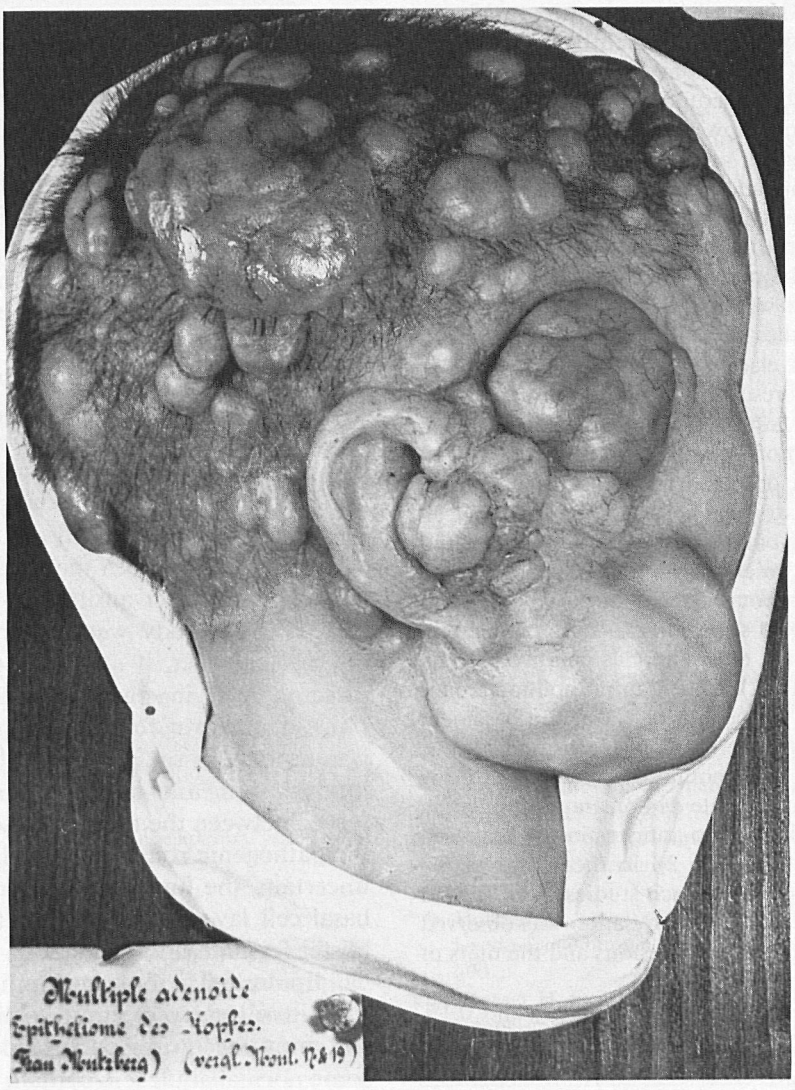

Wax model of multiple adenoide naevoepitheliome und Epithelioma adenoides cysticum, 1910 (Vogelbacher) from the collection of the University of Bonn, Bonn, Germany. Photograph couresty of Uwe Reinhold, M.D., Department of Dermatology, University of Bonn, Bonn, Germany.