Short Communication

Psychologic Status in Patients with Temporomandibular Disorders

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Purpose: The aim of this study was to investigate diferrences in the prevalence of depression and somatization scores in temporomandibular disorder (TMD) patients. ***Materials and Methods:*** One hundred fifty-four patients with single and/or multiple RDC/TMD diagnoses were classified into 7 groups based on Axis I criteria. Somatization and depression scores from the Symptom Checklist-90 were compared between groups. ***Results:*** The results of this investigation indicate that patients with myofascial pain and arthralgia psychologically differed from those with disc displacement. These results were in accordance with findings that support the notion that the pain induces psychologic sequelae, at least in relation to depression and somatization. ***Conclusion:*** It was concluded that psychologic factors play an important role in etiopathogenesis of TMD, as demonstrated by an increase in levels of depression and somatization in TMD patients. *Int J Prosthodont 2006;19:28–29.*

Studies have indicated that patients with temporomandibular disorders (TMD) demonstrate increased somatization, stress, anxiety, and depression. The objectives of this study were to investigate the relationship between Research Diagnostic Criteria TMD (RDC/TMD) diagnoses and psychologic status of TMD patients by comparing the levels of depression and somatization in patients in single and multiple RDC/TMD diagnostic groups.

Materials and Methods

One hundred fifty-four patients (37 men and 117 women; mean age, 39.0 ± 14.5 years) with RDC/TMD-defined clinical TMD[1] were selected. Patients were subsequently classified into 7 groups based on the presence of the various RDC/TMD Axis I diagnostic groups. Differences in mean Symptom Checklist-90 depression and somatization scores between the diagnostic groups were compared by 1-way analysis of variance and Scheffé post hoc tests at a significance level of .05.

Results

The frequencies of the different groups were as follows: group 1 (muscle disorder [MD]), 35.7%; group 2 (disc displacement [DD]), 18.2%; group 3 (arthralgia, arthritis, arthrosis [AAA]), 7.8%; group 4 (MD + DD), 9.1%; group 5 (MD + AAA), 13.0%; group 6 (DD + AAA), 9.1%; group 7 (MD + DD + AAA), 7.1%. The majority of patients had 1 diagnosis (61.7%), while the remaining patients experienced 2 or more diagnoses (38.3%). The most frequent clinical diagnoses that affected TMD patients were MDs (myofascial pain) (64.9%), and the least frequent were arthralgias (27.9%). About 19.5% of TMD clinical patients yielded severe depression scores, and 27.3% experienced severe levels of nonspecific physical symptoms scores. From the total patient sample, 28 patients (18.2%) were classified as chronic patients, and only 6 chronic patients (21.4%) had high disability with moderately and severely limiting symptoms (psychosocially dysfunctional patients).

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Table 1 Results of Analysis of Variance for Depression and Somatization Scores With and Without Pain Items in 7 Diagnostic Groups

	Source of variability	Sum of squares	df	F	*P*
Depression scores	Between groups	4.26	6	4.27	.001
	Within groups	24.44	147		
	Total	28.70	153		
Somatization scores with pain items included	Between groups	8.18	6	5.44	.001
	Within groups	36.83	147		
	Total	45.01	153		
Somatization scores with pain items excluded	Between groups	5.58	6	3.44	.001
	Within groups	39.80	147		
	Total	45.01	153		

df = degrees of freedom; F = F ratio; *P* = level of significance.

Results of the analysis (Table 1) showed significant differences between the groups, in the order of: levels of depression scores ($P < .001$), somatization scores with pain items included ($P < .001$), and somatization scores with pain items excluded ($P = .003$). Scheffé post hoc tests were additionally performed for multiple comparisons within diagnostic groups. Significant differences were found in levels of depression scores between patients with DD (group 2) and patients with MD + AAA (group 5) ($P < .001$); levels of somatization scores with pain items between patients with DD (group 2) and patients with MD + AAA (group 5) ($P = .032$); and levels of somatization scores without pain items between patients with DD (group 2) and patients with MD + DD + AAA (group 7) ($P = .016$).

Discussion

The prevalence of clinical TMD diagnoses and psychologic variables was consistent with those of Swedish, American, Asian, and Croatian cross-cultural studies in which the RDC/TMD protocol was used.[2] The prevalence of psychologic variables should be taken with caution, however, because there are no published data concerning the prevalence rates of depression and somatization in Croatian population.

Patients diagnosed with myofascial pain and arthralgia (groups 5 and 7) had significantly higher levels of depression and somatization than patients diagnosed with DD only (group 2). The results indicate that, although there is a link between myofascial pain, arthralgia, and increased levels of depression and somatization, it is not possible to determine whether the psychologic differences observed are the cause or result of pain/dysfunction experienced in certain subtypes of TMD. First, the patients in group 2 (DD) were pain-free, and it is certainly possible that the observed relationships would be different in such TMD populations. Second, while the RDC/TMD scales for depression and somatization have considerable data in support of reliability, validity, and clinical utility, they merely provide an assessment of clinical characteristics and are not diagnostic. Third, the majority of TMD patients were not psychosocially dysfunctional chronic patients (small sample), so the hypothesis that the experience of chronic pain contributes to the elevated rates of depression and somatization in patients with myofascial pain and arthralgia could not be supported in this study. However, psychologic factors are generally recognized as important variables in the diagnosis of orofacial pain. It is therefore essential that psychologic factors, if present, be identified early in the initial management of TMD, because failure to do so may result in treatment failure and worsening of the patient's condition.[3–5]

References

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