Commentary on Temporomandibular Disorders in Adolescents

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The paper by Godoy et al, although not of strict epidemiologic character, shows a frequency of temporomandibular disorders (TMD) of 16% in 16- to 18-year-old subjects. It must be regarded as important to identify young people with TMD, especially those suffering from pain. TMD is common in children and adolescents. Earlier studies from the United States and Sweden have reported prevalence figures between 2% to 7% for TMD in combination with pain. The differences in prevalence may be a result of differences in how the questions were phrased and the time intervals of the symptoms. Pain occurring once a week or more has often been used; this interval has been shown to be clinically relevant, since more than half of adolescents reporting TMD-related pain once a week or more had a demand for treatment. The prevalence seems to increase with age, and after the age of 14, differences between the sexes have been reported. In the late teenage years, girls report TMD pain more often than boys; therefore, a study of adolescents aged 16 to 18 years—with a predominance of girls—is worthy of interest.

Several different risk factors for developing TMD have been studied. The importance of psychosocial functioning has received more attention in recent years, and the Research Diagnostic Criteria for TMD has been used to assess psychosocial and behavioral factors. An interesting alternative method of measuring emotional problems in 16- to 18-year-old subjects is by assessing self-esteem. Reports of higher stress levels, more somatic complaints, and aggressive behavior have been presented for young adolescents reporting TMD pain. Thus, the importance of a holistic view of the TMD patient becomes more and more evident.

Literature Abstract

Effect of abutment angulation on the strain on the bone around an implant in the anterior maxilla: A finite element study

This study examined the strain distribution on the bone around an implant in a simulated anterior maxilla using 2 different abutments with finite element analysis. Two-dimensional finite element models were established for an implant with a straight abutment and a 20-degree angled abutment in the anterior maxilla. The implant used was 4 × 13 mm. The bone bed was designed with a cortical layer thickness of 0.5 mm. Simulated loads of 178 N were applied on the cingulum area. The results showed that: *(1)* the greatest strain was found on the cancellous bone, adjacent to the 3 most apical microthreads on the palatal side of the implant; *(2)* the same strain pattern was noted around both types of abutments; *(3)* most of the deformation in the cancellous bone was within physiologic limits, but small areas showed strain beyond the physiologic limit; and *(4)* the model predicted a 15% higher maximum bone strain for the straight abutment compared with the angled abutment. Usage of angled abutments in the anterior maxilla may not be a clinical concern from a strain point of view.

Saab XE, Griggs JA, Powers JM, Engelmeier R. *J Prosthet Dent* 2007;97:85–92. **References:** 49. **Reprints:** Dr Jason A. Griggs, Baylor College of Dentistry, Texas A&M University System Health Science Center, Department of Biomaterials Science, 3302 Gaston Ave, Dallas, TX 75246. Fax: 214 370 7001—*Ansgar Cheng, Singapore*