- 34. Ibrecevic H, Al-Jame Q. Ferric sulfate as pulpotomy agent in primary teeth: Twenty month clinical follow-up. *J Clin Pediatr Dent.* 2000;24:269-272.
- 35. Waterhouse PJ, Nunn JH, Whitworth JM. An investigation of the relative efficacy of Buckley's formocresol and calcium hydroxide in primary molar vital pulp therapy. *Br Dent J.* 2000;188:32-36.
- 36. Dean JA, Mack RB, Fulkerson BT, Sanders BT. Comparison of electrosurgical and formocresol pulpotomy procedures in children. *Int J Pediatr Dent.* 2002;12:177-182.
- 37. Felson DT. Bias in meta-analytical research. *J Clin Epidemiol.* 1992;45:885-892.

- 38. Chalmers IC, Smith H, Blackburn B, Silverman B, Schroeder B, Reitman D. A method for assessing the quality of randomized control trial. *Control Clin Trials.* 1981;2:31-49.
- 39. Olkin I. Statistical and theoretical considerations in meta-analysis. *J Clin Epidemiol*. 1995;48:133-146.
- Schulz KF, Chalmers IC, Hayes RJ, Altman DG. Empirical evidence of bias: Dimensions of methodological quality associated with estimates of treatment effects in controlled trials. *J Am Med Assoc.* 1995;273:408-412.
- 41. Nadin G, Goel BR, Yeung CA, Glenny AM. Pulp treatment for extensive decay in primary teeth. *Cochrane Database of Systemic Reviews*. 2003;1:CD003220.

## ABSTRACT OF THE SCIENTIFIC LITERATURE



## EFFECT OF CHIN-CAP THERAPY ON TEMPOROMANDIBULAR JOINTS

The purpose of this study was to evaluate the long-term effects of chin-cap therapy on temporomandibular disorder (TMD) symptoms. The treatment group consisted of 32 individuals with Class III malocclusions who were treated with chin-cap therapy for an average of 1.8 years. Two control groups consisted of: (1) 39 untreated individuals with skeletal Class III malocclusion; and (2) 53 dental students with normal occlusion. Subjects were classified as symptomatic if one positive sign or symptom was found upon examination. The distribution of symptomatic subjects was higher in the normal occlusion group than the treated and untreated Class III groups. The pain occurrence was significantly higher in the normal occlusion group than the treated Class III group. The main conclusion is that chin-cap therapy is not a risk factor for TMD.

Comments: The normal occlusion group consisted of dental students whose mean age was 19.2 years (range=18-21.4 years), while the treatment group had a mean age of 18.4 years (range=13.9-22.5 years). The dental students tended to be older and to likely have a more stressful lifestyle. As stress has been shown to be a significant risk factor for TMD, the authors could have selected a more suitable normal occlusion control group. LDK

Address correspondence to Professor Mirzen Arat, Ankara Universitesi, Dis Hekimligi Fakultesi, Ortodonti AD, Besevler, Ankara 06500, Turkey.

Arat ZM, Akcam MO, Gokalp H. Long-term effects of chin-cup therapy on the temporomandibular joints. *Eur J Orthod*. 2003;25:471-475.

43 references

Copyright of Pediatric Dentistry is the property of American Society of Dentistry for Children and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.