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The relationship between static occlusion and functional occlusion in a dental school population

R. Thomas Tipton, DMD, MDS; Donald J. Rinchuse, DMD, MS, MDS, PhD[a]

[a]University of Pittsburgh, School of Dental Medicine, Dept. of Orthodontics, Salk Hall — 3501 Terrace Street, Pittsburgh, PA 15261

ABSTRACT

The relationship between static occlusion and functional occlusion was evaluated in 101 dental and dental hygiene students. The sample was selected from a population of 467 students who were enrolled at one dental school during the 1987–1988 academic year based upon the following criteria: age range 18 to 32 years; caucasian race; no prior orthodontic treatment; at least 28 natural teeth present; no occlusal adjustments; and no large restorations, crowns or bridges. Fifty-two (52) of the subjects possessed “normal” static occlusion, 26 had a Class I malocclusion, 16 were found to have a Class II malocclusion, and 7 had a Class III malocclusion. The majority (i.e., 75%) of the 101 subjects possessed non-working (balancing) functional contacts. Seventy-five (75) of the subjects possessed balanced occlusion, nine had canine-protected occlusion, nine possessed group function occlusion, and eight had mixed canine-protected/group functional occlusion. This study found no statistically significant relationship between static occlusion and functional occlusion, however, there was a trend for balanced occlusion to be more often associated with “normal” (ideal) static occlusion.

R.T. Tipton is in private practice in Tempe, Arizona

D.J. Rinchuse is an Associate Professor of Orthodontics at the University of Pittsburgh School of Dental Medicine, in Pittsburgh, Pennsylvania

KEY WORDS: Static occlusion, Functional occlusion, Non-working (balancing) contacts.