What Can Orofacial Myofunctional Clinicians Offer To Counter Dental Aligment Changes (Relapse) Following Orthodontic Treatment

QUESTION TO DR. MASON: When a dentist or orthodontist refers a patient with the complaint that tongue thrusting is causing dental relapse after the completion of orthodontic treatment, how can orofacial myofunctional clinicians respond appropriately to this referral complaint?

DR. MASON'S RESPONSE: The term "relapse" (unwanted changes in dental alignment during the retention phase following the completion of orthodontic treatment) has taken on a bad name. To some orofacial myofunctional clinicians and orthodontists and other dentists providing orthodontic treatment, a word association test using the stimulus word "relapse" would quickly result in the response of "tongue thrusting". Such a restricted view of relapse needs to be changed.

Many within the dental community still do not have a good understanding of the many factors that can lead to dental relapse. As a result, tongue thrusting often serves as a scapegoat when other plausible reasons for relapse have not been recognized. When this occurs, a problem is transferred to you to correct that is not resolved by eliminating tongue thrusting since the thrusting is not the cause of the dental changes seen.

Many dentists and orthodontists continue to focus inappropriately on tongue thrusting as a cause of any dental changes seen in the retention period while failing to identify and link an abnormal rest posture of the tongue and an abnormal, habitually open freeway space to the dental changes (relapse) incorrectly attributed to tongue thrusting.

WHAT BESIDES THE TONGUE CAN CAUSE RELAPSE FOLLOWING ORTHODONTIC TREATMENT?

Here is a list of factors, other than the tongue, that can account for relapse changes in the dentition during the retention phase: 1) poor resting relationship between the lower lip and upper incisors. At rest, the lower lip should cover 2-3 mm of upper incisors - whether or not there is lip competence. When this relationship is not established during orthodontic treatment, relapse forward of upper incisor teeth that were retracted during orthodontic treatment may occur; 2) incisors expanded forward during treatment; 3) intercanine width expanded during treatment; 4) unresolved airway interferences; 5) late jaw growth, especially into open bite; and 6) a freeway space habitually open beyond the normal range. (Sources for this list: Dr. Richard Riedel, [from the Orthodontic Department at the University of Washington, Seattle], and also, Dr. William Proffit and Dr. Robert Mason).

WHAT CAN OROFACIAL MYOFUNCTIONAL CLINICIANS DO TO COUNTER DENTAL RELAPSE?

Where there are concerns about post-orthodontic relapse, here is an orofacial myofunctional caveat about such patients: **If, following orthodontic treatment, an orofacial myofunctional clinician has established; 1) a lips-together rest posture; 2) the tongue in a rest position other than interdental; and 3) a normal vertical dimension (freeway space) that is within the normal range of 2-3 mm at the molars, dental relapse will not occur, in spite of whether or not the patient has a retained tongue thrust during speech or swallowing.** When these three factors are normalized, and if relapse persists, the causes involved are related to items on the list above of factors other than the tongue, such as unresolved airway interferences.

WHAT ABOUT TONGUE THRUSTING?

Although working to eliminate tongue thrusting during speech and swallowing is recommended for cosmetic improvement or for any other reason or purpose, tongue thrusting is not the cause of orthodontic relapse in spite of what many dentists and orthodontists continue to believe. The link between OMDs and orthodontic relapse involves an abnormal rest position of the mandible, tongue and/or lips rather than any functional movement patterns of the tongue.