Orthodontics and TMD

Orthodontic treatment is often considered in the situation when major occlusal alterations are thought to be dentally advantageous. Fixed, removable, functional, and extraoral orthodontic appliances are all capable of improving occlusal and mandibular stability. However, orthodontics employed for the treatment of TMD is a different issue. Many retrospective clinical studies have examined the relationship between orthodontic treatment and TMD and have found no significant correlation on a population basis. Furthermore, recent reviews of the literature concluded that, based on the available evidence, orthodontic treatment “neither causes nor cures” TMD.

After being involved in a motor vehicle accident (MVA), some individuals complain that their “bite feels different”. The dental practitioner may even observe this reported “malocclusion”. Hence, treatment involving orthodontics may be a consideration in restoring the original maxillomandibular relationship resulting in occlusal harmony and stability. However, a situation that must be accounted for is that during an MVA the masticatory and/or cervical muscles may become traumatized with associated pain and/or pain referral. Therefore, alterations to the maxillomandibular relationship and subsequent occlusal scheme may be a result of pain from the musculature. This can be diagnosed with a thorough history and comprehensive examination (as previously discussed). If treatment is directed at restoring proper muscle function (relief of pain) then the maxillomandibular relationship and occlusal scheme will naturally return to its original position. If orthodontics would have been instituted then one must
question the biologic advantage to be gained from this invasive treatment associated with additional expense.\textsuperscript{17, 18}
References


