

Orthodontic Management of Mentally Challenged Individuals. Is It Feasible?

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The face is the primary focus of identification and very rich source of non-verbal information [1]. The human face has infinite variability that enables us to distinguish one individual from another. Individuals with mental subnormality usually have a different facial appearance, which generates a far from desirable first impression [2]. Though 'ideal occlusion' a hypothetical concept based on the anatomy of the teeth, is rarely found in nature, prevalence and severity of malocclusion is higher in mentally challenged individuals and more severe in Down syndrome individuals. This poses an additional obstacle to social acceptance, not only from an esthetic point of view, but also compromise all aspects of oral function, like in mastication or swallowing patterns. The psychosocial consequences of malocclusion due to unacceptable dental aesthetics may be as serious as or even more serious than the biological problems [3].

Though it has been widely reported among many studies, it is quite difficult to estimate the exact proportion of dento-facial as well as occlusal anomalies and orthodontic treatment need among mentally challenged individuals. This is due partly to the multiplicity of measurement methods and the difficulty in standardising criteria. The lack of suitable universal methods for recording and grading malocclusion and the different criteria used to define malocclusion have made comparison between studies difficult [4].

Oral dysfunctions and para-functions of the masticatory system were hypothesised as being responsible for the increased prevalence of malocclusion in mentally subnormal individuals [5]. There appears to be a simple correlation between mental status and the severity of craniofacial handicap. But in the case of Down syndrome the effect of chromosomal aneuploidy coupled with mental deficiency manifests not only as anomalies of dental occlusion, but also discrepancies of craniofacial complex [6]. Unfortunately, the extent of mental deficiency in mentally challenged young individuals has often been exaggerated in the literature, and this may have caused dental professionals to shy away from treating these patients. However, advances in medical science, improved educational system as well as recognition of oral characteristics of these individuals can all be incorporated together for a better orthodontic practice [7].

Earlier for many mentally subnormal subjects, orthodontic care may seem out of reach. However, new technologies in treatment, and the availability of advanced education in caring for special needs patients, are making a surprising and welcome difference in the lives of many patients with mental disabilities. The American Association of Orthodontists reports that many of its members are now able to successfully address the orthodontic treatment needs of those with mental disabilities. New technologies are opening new doors for these special needs patients seeking treatment for dental alignment issues and complications specific to a patient's disability. These include temporary anchorage devices that help to move specific teeth, minimally invasive surgical procedures, clear aligners that can be removed for hygiene purposes, implants, self-ligating brackets, and improved oral hygiene measures. Thus, these special patient populations, just like others can benefit from the boost of confidence that comes with a healthy, beautiful smile [8].

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Currently, few attempts have been made to prevent and correct malocclusion among mentally challenged young individuals with tremendous successes. Many different adjunctive treatment modalities are available to the profession of dentistry today, several of which have not been previously exploited in the orthodontic

specialty. By familiarizing themselves with these, orthodontists can plan a varied combination of modalities. In this way, they may broaden the therapeutic options for many of the more difficult cases, hitherto denied professional attention. This will enable them to offer orthodontic treatment to that compromised section of the juvenile public, which manifestly needs it, but for whom its delivery has previously not been made available [9].

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