

Editorial-3

Orthodontics and its Relationships with Other Disciplines in Dentistry

The collaboration between the orthodontist and the dentist or dental specialist begins at the start of the diagnostic examination of the orthodontic patient. Treatment of periodontal and dental problems and establishment of optimum oral hygiene are indicated before orthodontic treatment. However, the statement that ‘all dental treatment should be completed before orthodontic treatment started’ should be evaluated with caution. In cases who will be treated with extraction of teeth, filling or root canal treatment of these teeth would be waste of time and money. Thus, if an orthodontic treatment is needed, in addition to other dental procedures, orthodontic evaluation of the patient at the first examination will eliminate the potential risks that can occur throughout dental treatment. Final restorative treatment, in these patients, is generally completed after orthodontic therapy.

Treatment of complex dental problems requires multidisciplinary team approach. Oral rehabilitations of patients with tooth aplasia and dental trauma include a number of dental considerations from different disciplines of dentistry, including orthodontists, oral surgeons, pediatric dentists, endodontists and prosthodontists.¹⁻³

Orthodontics and periodontal treatment relationship is two-fold: Malocclusions like crowding and occlusal trauma may provide an environment that facilitates plaque accumulation and the establishment of a pathogenic flora that causes periodontal diseases. On the other hand, periodontal problems can be predisposing factors to malocclusions. Loss of alveolar bone support in case of periodontal disease results in migration and spacing of teeth. In both situations, patients benefit from orthodontic treatment to restore the optimal periodontal health, original tooth position, occlusal vertical dimension.^{4,5}

Orthodontic treatment can contribute to results that are difficult to obtain by other means of esthetic dentistry. It is possible to reposition the gingival margins of the teeth by extrusion and intrusion to improve esthetics as marginal periodontium and alveolar bone migrate toward the direction of tooth movement. Extrusion of teeth can also be used for alveolar bone augmentation prior to the placement of implants.⁶⁻⁹ This is a nonsurgical means of increasing the amount of available bone around the teeth with periodontal defects. In cases of tooth agenesis or previous extractions, the bone is often atrophic and the insertion of implants is often not possible. In these cases, horizontal movement of teeth by routine orthodontic treatment widens the alveolar bone allowing the insertion of implants.¹⁰

Esthetics play a major role in dental practice as stressed by Spear and Kokich in 2007.¹¹ There is an increasing demand of patients to look more attractive and the need of an interdisciplinary team approach to deliver the highest level of dental care to each patient. As they stated ‘every dental practitioner must have a thorough understanding of the roles of these various disciplines in producing an esthetic makeover, with the most conservative and biologically sound interdisciplinary treatment plan possible’.

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