

tissues, and correct them through typical oral health care and making adjustments in the applied system of forces and moments to achieve a suitable roots torque.

Suggested treatments for an apical or coronal shift of the gum contour are orthodontic treatment (by extrusion or intrusion of the teeth), crown lengthening surgically (by osseous or gingival resective surgery).

When clinical cases are with probability existence of bony fenestration or dehiscence, then a dental extraction or orthostripping should be a part of the treatment plan to avoid the excessive expansion of the dental arch, but when there is a need for expansion or dental movement outside the alveolar bone envelope, then this requires prior surgical procedures.

In combined orthodontic and periodontal cases, it is important to benefit from the skeletal anchorage (TADs) by using micro or mini-implants, which will be employed to boost the final treatment outcomes.

Cases of thin biotype with dental crowding in the lower anterior region, it is recommended to limit their labial movement by using a fixed appliance (self-ligating bracket system), Segmental arch technique, round arch wires, light Class III elastics, braces with individual torques, and orthostripping consciously and rationally.

CONCLUSION

The relationship between orthodontics and periodontal tissues is spiky, and in which many factors are involved, oral health (plaque, proper oral care, presence of an inflammation or periodontal diseases), the structure of the periodontal tissues (pattern of biotype, keratinized tissue, alveolar bone, and cortical plates), good planning of the orthodontic treatment in parallel with the assessment of the need for periodontal treatment

(before, during or after treatment), type of orthodontic appliance and the output orthodontic movements.

So, we strongly recommend the multidisciplinary dental approach and hope that the aforementioned recommendations for orthodontic treatment will lead to clinical outcomes, that fulfill esthetic with functional requirements and to be safe at the same time on both soft and hard periodontal tissues for short/long-term.

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