Editorial

Open Access

Root Coverage in Lower Premolar Area

Safaa Boubdir¹, Wafa EL Kholti²*, Khadija Amine³, Jamila Kissa³

¹DDS, MDS, Research Assistant, Periodontics Department, University of Hassan II of Casablanca, Morocco

²DDS, MDS, PhD, Assistant Professor, Periodontics Department, University of Hassan II of Casablanca, Morocco

³DDS, MDS, Professor of Higher Education, Periodontics Department, University of Hassan II of Casablanca, Morocco

*Corresponding author
Wafa EL Kholti, Assistant Professor, Periodontics Department, University of Hassan II of Casablanca, Morocco.

Gingival Recession (GR) is defined as a mucogingival defect referred to an apical migration of the gingival margin up to the cemento-enamel junction. The etiology of gingival recession could be multifactorial and numerous factors should be taken into account in diagnosis phase [1].

GR affects a large part of population. AL bandar and Kingman estimated that 23.8 million of adults in USA have at least one tooth surface with a GR ≥3 mm [2]. More recently, El kholti et al reported a high prevalence of GRs (88.5 %) in a sample of 400 Moroccan periodontitis patients [3]. Lower incisors were the most affected teeth (79.8 %). Most patients have advanced GRs with advanced interproximal attachment loss. 55,80% of patients have at least one lower premolar with a GR ≥1 mm [3].

Complete root coverage (CRC) stills a challenge for the clinicians and may depend on tooth location. Data of literature showed that CRC is less predictable in the mandible than in the maxilla.

Different surgical approach was described in the literature to cover denuded root surfaces. Coronally Advanced Flap (CAF) represent the most investigated flap approach for root coverage. Multiple parameters can influence the results of this procedure such interproximal attachment loss, amount of keratinized tissue, recession dimensions, height of papilla.

Tooth location is also an important parameter that can affect the outcome of the CAF, in particular when anterior and posterior teeth were compared. Zucchelli et al showed, in their systematic review, a higher mean root coverage and CRC in the anterior teeth than in the posterior teeth, with an odds ratio of 1.63 for achieving CRC in canines and incisors compared to premolars and molars [4]. However, no difference was noted between upper and lower teeth. From an anatomical point of view, root coverage in premolar area stills a challenging procedure due to the high muscle tension in mandible and to the mental nerve proximity. Consequently, caution should be taken during surgery and especially when performing deep apical incision.

Despite the limited data available on tooth location as a prognostic root coverage factor, CRC tends to be more predictable in upper than lower teeth. Further studies are needed to evaluate the CAF outcomes in this challenging area.

References

1. Amine K, El Kholti W, Kissa J (2019) Periodontal root coverage. An Evidence-Based Guide to Prognosis and Treatment. Springer Edition: 9-21.
2. Albandar JM, Kingman A (1999) Gingival recession, gingival bleeding, and dental calculus in adults 30 years of age and older in the United States, 1988-1994. J Periodontol 70: 30-43.
3. Wafa El Kholti, Safaa Boubdir, Zineb Al Jalil, Loubna Rhalimi, Sihame Chemlali (2024) Prevalence and risk indicators of buccal gingival recessions in a Moroccan periodontitis patient: A retrospective study. Saudi dent J 36: 117-122.
4. Zucchelli G, Tavelli L, Ravidà A, Stefanini M, Suárez-López del Amo F (2018) Influence of tooth location on coronally advanced flap procedures for root coverage. J Periodontol 1-14.