GINGIVECTOMY AS A MANAGEMENT OF GINGIVAL ENLARGEMENT IN ORTHODONTIC PATIENT: A CASE REPORT

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ABSTRACT

Introduction: Orthodontic treatment can cause a gingival enlargement. Gingivectomy is a surgical procedure in which gingival pockets are eliminated by removal of gingival tissue. Gingivectomy should be performed in case of gingival enlargement with the existence of pockets. Simple gingivectomy currently used as a surgical step if the pockets and enlargement still persist after periodontal initial treatment.

Objectives: To eliminate pockets and to recontour the gingiva in orthodontic patient with gingival enlargement.

Case: A 24 year old female patient using orthodontic appliance for 2 years with gingival enlargement on anterior lower gingiva. Clinical examination there was an enlargement on anterior lower gingiva, plaque score average. Radiographic examination showed no bone loss and no periapical lesion. Patient was diagnosed with chronic generalized gingivitis and anterior lower gingival enlargement.

Case Management: Gingivectomy was done after periodontal initial treatment, scaling and rootplaning, one week and one month control showed no enlargement on gingiva and no pocket.

Conclusion: Gingivectomy is used to eliminate pockets and gingival enlargement caused by orthodontic appliance.

Keywords: Gingival enlargement, gingivectomy, orthodontic
Introduction: Orthodontic treatment can cause a gingival enlargement. Fixed orthodontic appliance increased plaque retention, can lead to several adverse conditions such as the occurrence of gingivitis, and gingival enlargement. Low dose continuing nickel release from orthodontic appliance might be the initiating factor for gingival enlargement, it has the capability of increasing epithelial cell proliferation. Gingivectomy is a surgical procedure in which gingival pockets are eliminated by removal of gingival tissue. Gingivectomy should be performed in case of gingival enlargement with the existence of pockets. Simple gingivectomy currently used as a surgical step if the pockets and enlargement still persist after periodontal initial treatment.

Objectives: To eliminate pockets and to recontour the gingiva in orthodontic patient with gingival enlargement.
Case: A 24 year old female patient using orthodontic appliance for 2 years with gingival enlargement on anterior lower gingiva. Clinical examination there was an enlargement on anterior lower gingiva, plaque score average (Figure 1). Radiographic examination showed no bone loss and no periapical lesion (Figure 2). Patient was diagnosed with chronic generalized gingivitis and anterior lower gingival enlargement.

![Figure 1. Pre operative clinical examination](image1)

![Figure 2. Pre operative Panoramic Radiograph](image2)

Case Management: Gingivectomy was done after periodontal initial treatment, scaling and rootplaning. Patient was explained about the procedure and informed consent was taken. The area was anaesthetized using pahacain with a mental nerve block (Figure 3). Pocket depth was measured and marked with pocket marker, bleeding points show marked pockets (Figure 4). Initial excision with uninterrupted beveled angled 45° using blade #15d (Figure 5), then all the excised tissue was removed (Figure 6). Superfine tear bur was used to smoothing sharp edges and the bulky tissue (Figure 7). Periodontal dressing (COE PAK) was placed on the surgical site (Figure 8). At a week and a month follow up showed no enlargement on gingiva (Figure 9 and 10).
Conclusion: Gingivectomy technique is used to eliminate suprabony pockets and gingival enlargement caused by orthodontic appliance.

Reference:


