



CONNECTIVE TISSUE GRAFT FOR ROOT COVERAGE: CLINICAL CASE REPORT

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ARTICLE INFO

Article History:

Received 19th November, 2017
Received in revised form
12th December, 2017
Accepted 23rd January, 2018
Published online 28th February, 2018

Key Words:

Connective Tissue Graft;
Gingival Retraction;
Root Coverage.

ABSTRACT

Introduction: Gingival recessions constitute, by definition, displacement of the gingival margin apically to the amelocemental junction. The triggering factors are: traumatic brushing, inflammation, radicular hypersensitivity, unsightly appearance, non-carious cervical lesions, predisposition to root caries and etc.

Objective: The objective of this study was to present the clinical sequence and the ideal surgical technique for the accomplishment of the connective tissue graft, improving the aesthetics and sensitivity reported by the patient, making the patient satisfied.

Case Report: A 26-year-old male patient has no periodontal disease, no history of systemic disease, no smoking, no medication or any other types of addiction that could interfere with periodontal health. The reason for this recession was gingival recession, and as a planning the best option was to perform the connective tissue graft surgery for root coverage.

Conclusion: After the surgical technique and follow - up of the case it was possible to conclude that the results were predictable and satisfactory for the root coverage of connective tissue.

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Citation: Daniele Fernanda da Costa, Gabriela Cristina Neves, Ana Carolina Nicolau Fernandes, Idiberto José Zotarelli Filho, Leandro Moreira Tempest and Patrícia Garani Fernandes, 2018. "Connective tissue graft for root coverage: clinical case report", *International Journal of Development Research*, 8, (02), 18992-18995.

INTRODUCTION

Gingival recessions are, by definition, displacement of the gingival margin apically to the amelocemental junction, which consequently causes exposure of the root surface to the buccal environment (Agrawal, 2010 and Araújo, 2007). The etiology of gingival recession may be multifactorial; Periodontal disease, poor tooth position, high insertion of the braces, flanges or muscle fibers, bone dehiscences, bone fenestration, fine bone cortical, lip pressure and the reduced range of inserted gingiva have been related as the main local factors (Cortellini, 2009). The triggering factors are: traumatic brushing, inflammation, radicular hypersensitivity, unsightly appearance, non-carious cervical lesions, predisposition to root caries; Fixed prosthesis poorly adapted; (CPR), a malocclusion of the outer space of the incision, and a dislocation of the outer space.

Gingival recessions can be classified according to Miller's definition: Class I: the recession does not overcome the mucogingival junction and there is no loss of supporting tissue or protection in the interdental region; Class II: the recession goes beyond the mucogingival junction and there is no loss of support or protection tissue in the interdental region; Class III: the recession goes beyond the mucogingival junction and there is loss of support or protection tissue in the interdental region and / or inadequate dental positioning; Class IV: the recession goes beyond the mucogingival junction and there is loss of support or protection tissue in the interdental region and / or dental positioning is extremely inadequate (Dilsiz, 2010). The technique of the connective tissue graft, according to the results obtained in the literature, has been shown to be very reliable and with high success rates in relation to the root coverage, being preferred in most of the root coverage surgeries, due to its innumerable advantages In relation to the others (Feitosa, 2008; Feng, 2012 and Ferrão Junior, 2003). The objective of this study was to present the clinical sequence

and the ideal surgical technique for the accomplishment of the connective tissue graft, improving the sensitivity and aesthetics reported by the patient, making the patient satisfied. In order to reach this goal, a search was also made in scientific literature with the terms: connective tissue graft, gingival retraction and root coverage.

Case Report

Male patient, 26 years of age, does not present periodontal disease, no history of systemic disease, no smoking, no use of medication or any other type of addiction that may interfere with periodontal health, sought care of the specialist dental surgeon Reported to be dissatisfied with aesthetics and with sensitivity in the tooth 42. When performing the clinical examination, recession was observed in the element (Figure 1), with 3.0 mm of gingival retraction, no periodontal pocket or bacterial plaque accumulation.



Figure 1. Image showing the initial gingival recession

The reason for this recession was gingival recession, and as a planning the best option was to perform the connective tissue graft surgery for root coverage. For the treatment of the recession, subepithelial connective tissue graft surgery was performed for the class III case, followed by 01 (hum) month, presenting techniques and favorable effects of the surgical procedure. The subepithelial connective tissue procedure is indicated for major and multiple defects with good vestibule depth and divided thickness. Adjacent to the bare root surface, the donor connective tissue is placed in the middle of the divided flap.

Surgical technique

Local antisepsis was performed with 0.12% Chlorhexidine, in the receptive area, anesthesia with topical anesthesia in the region that perforated with the needle and anesthesia infiltrative with mepivacaine, followed by scraping with the aid of Gracey curettes for the preparation of same. For the incision, a scalpel blade 15c was used if the intra-sulcular technique in element 42 maintaining a gingival band in elements 41 and 43 with relaxing incisions in the distal meure of 41 and mesial of 43 and partial flap detachment, the periosteum should Be left on the bone. As donor area, the palate region was chosen close to the premolars, anesthesia was performed with mepivacaine, only an epithelial incision

was made on the palate, at a right angle to the underlying bone, the connective tissue necessary for the recoating was removed, Leaving the tissue reserved in a tub with saline and made the suture with silk suture 5.0 thread. Then, the decontamination treatment of the root exposed with EDTA in gel and irrigation with physiological saline was carried out, after which the tissue removed from the palate was placed in the recipient area, positioning itself in the mesio and distal portions where the relaxants were made in the neighboring teeth, Rebated the flap and sutured with vycril 5.0 reabsorbable wire over the connective graft. The patient was medicated with amoxicillin 500mg of 08 at 08 hours for seven days and paracetamol 750mg every 12 hours for five days. After 10 days the suture was removed. The figures 1 and 2 show the operative and the figure 3 shows the follow-up after 30 days.



Figure 2. Image immediately after surgery



Figure 3. 30-day postoperative follow-up image

DISCUSSION

There are several periodontal surgical techniques that can be used to cover root recess (Agrawal, 2010; Araújo, 2007; Chambrone, 2008). The use of the best technique varies

according to the need of each case. Among several authors there are controversies at some points in the results of each technique (Cortellini, 2009; Costa, Gúbia, 2010; Dilsiz, 2010 and Feitosa, 2008). The asepsis of the recipient area is important, avoiding the trauma to maintain the wound stabilized, a postoperative protection with surgical cement can be used and also the prescription of chlorhexidine mouthwash for 15 days (Feitosa, 2008; Kina, 2015; Kato, 2005; Lee, 2002 and Mcguire, 2003). The biofilm control is fundamental for the success of surgical therapy, because in the presence of the inflammatory response there is a compromised gingival nutrition that can cause loss of the epithelial-conjunctival insertion and thus leading to the onset of recession (Mcguire, 2003; Mcguire, 2003; Menezes, 2009; Nelson, 1987 and Nemcovsky, 2004). The absence of loss of hard and soft tissue in height in the interproximal region is the essential biological principle to achieve success independent of the technique used (Newman, 2012 and Novaes Junior, 2003). Scarring stability, provided by fibrin from the clot and by suitable sutures, is crucial to the outcome of the surgery. The graft thickness was at least 1.5 mm (Oliveira, 2011; Paiva, 2016). The root coverage may not be complete, but the gingival gain inserted is of excellent predictability, with a tendency for the result to improve in the long term (Pini-Prato, 2010; Rahmani, 2006 and Rasperin, 2000). Furthermore, the subepithelial connective tissue graft may promote the regeneration of connective tissue on the root (Reis, 2009; Rodrigues, 2010; Silva, 2004). Studies have shown that the mean percentage of root coverage with the subepithelial tissue graft technique was 96.10% (Soares, 2011; Venturim, 2011), and the level of satisfaction of patients with this technique after 6 months of 100% (Zaccara, Ivana Maria, 2013).

Conclusion

After the surgical technique and follow-up of the case it was possible to conclude that the results were predictable and satisfactory for the root coverage of connective tissue.

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