following trauma involving a central incisor. Surgical treatment involved alveolar ridge augmentation using a GBR protocol. To ensure stable space maintenance and graft protection, a non-resorbable titanium mesh was selected as the barrier device. A digital workflow based on computer-aided design and manufacturing (CAD/CAM) technology was used to create a patient-specific mesh adapted to the morphology of the defect. The device was manufactured using 3D Laser Metal Fusion technology (Mysint100 SISMA, S.p.A., Piovene Rocchette, Italy).

DISCUSSION: The customized titanium mesh demonstrated precise adaptation to the defect area and provided effective stabilization of the grafted site during the healing period. Clinical evaluation revealed satisfactory bone regeneration, with restoration of both vertical and horizontal ridge dimensions.

CONCLUSION/CLINICAL SIGNIFICANCE: Digitally designed titanium meshes can represent a predictable solution for the reconstruction of complex periodontal defects. This approach enhances graft stability, preserves the regenerative space, and facilitates the creation of favorable anatomical conditions for subsequent implant placement.

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Management of Mandibular Anterior Recession Using a Free Gingival Graft

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INTRODUCTION: Gingival recession in the mandibular anterior region is a common clinical condition associated with insufficient keratinized tissue and an increased susceptibility to progressive recession. Therefore, augmentation of the attached gingiva is frequently required to enhance periodontal stability and support optimal oral hygiene maintenance.

CASE DESCRIPTION: A 38-year-old systemically healthy female patient presented with gingival recession and insufficient attached gingiva in the mandibular anterior region (teeth 31–41). Following comprehensive clinical evaluation, a free gingival graft (FGG) procedure was performed to increase the width of keratinized tissue. The graft was harvested from the palatal donor site and carefully adapted and stabilized at the recipient site. Postoperative healing was uneventful, with satisfactory tissue integration. At follow-up, a significant increase in the width of attached gingiva was observed, accompanied by partial root coverage. The clinical outcomes were documented with photographs at different healing stages.

DISCUSSION: Free gingival grafting is a well-established and predictable technique for increasing the width of keratinized tissue, particularly in areas with minimal attached gingiva. Although FGG is not primarily indicated for root coverage, partial root coverage may be achieved as a secondary outcome. This case further highlights the effectiveness of FGG in improving soft tissue conditions and promoting periodontal stability in the mandibular anterior region.

CONCLUSION/CLINICAL SIGNIFICANCE: Free gingival grafting represents a reliable therapeutic approach for increasing the width of attached gingiva and may provide additional clinical benefits, including partial root coverage. This technique contributes to the improvement of periodontal health and supports the maintenance of long-term tissue stability, particularly in anatomically challenging areas.

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Treatment and Follow-Up of Mandibular Lingual Peripheral Giant Cell Granuloma

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INTRODUCTION: Peripheral giant cell granuloma is a non-neoplastic reactive lesion characterized by localized soft tissue proliferation, most commonly triggered by chronic mechanical or inflammatory stimuli including previous tooth extraction, accumulated dental plaque, calculus deposition, and improperly adapted restorations. It predominantly affects the gingival tissues of the jaws, with a higher prevalence among female patients. Due to its tendency for local tissue infiltration and recurrence, thorough surgical removal remains the treatment of choice.

CASE DESCRIPTION: This report describes a 67-year-old female patient with hypertension and type 2 diabetes who presented with a lesion in the lingual region of the mandible. The lesion was pedunculated, painless, and increasing in size. No radiographic findings were observed. Excisional biopsy was planned, and 80 mg/2 mL + 0.01 mg/2 mL articaine hydrochloride/epinephrine (Maxicaine, VEM Medicament, İstanbul, Turkey) was administered. The lesion was removed with a 15 gauge scalpel (BRP, Huaian City, Jiangsu, China). A hemostatic agent (Surgicell, Neuchatel, Switzerland) was applied. Grade 2 mobility was detected in mandibular anterior teeth, which were later splinted with steel wire. A 3-month follow-up was completed.

DISCUSSION: Excisional biopsy was preferred due to the lesion's pedunculated nature and lack of association with critical anatomical structures. In high-risk areas, incisional biopsy may be considered. Tooth mobility can be managed with splinting techniques using different materials.

CONCLUSION/CLINICAL SIGNIFICANCE: This case is notable for its lingual location and occurrence in an older patient. Although the lesion was completely removed, recurrence remains possible and requires careful follow-up.

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