ABSTRACT

examination showed cutaneous hyperpigmentation, suggesting adrenal suppression due to the therapy. On intraoral examination, ulcers were observed on the palatal mucosa and dorsal surface of tongue.

RESULTS: Treatment consisted in relining of maxillary complete denture and topical application of clobetasol propionate 0.05% placed in 4% hydroxyethyl cellulose bioadhesive gel on internal surface of the denture twice daily for 15 days. At the end of second week, clobetasol applications were reduced to one a day. The patient was significantly improved after 3 weeks of topical therapy; in the examination, the dorsal surfaces of tongue and palatal mucosa had healed. Furthermore, the resolution of the intraoral lesions has allowed reducing the doses of systemic therapy, in order to reduce its side effects. CONCLUSION: In this case report, we described the management of a patient with Pemphigus vulgaris who had previously undergone treatment based on systemic immunosuppressive therapy. The oral lesions were not in remission, despite the use of a high dose systemic therapy. The use of dentures as a support for the topical application of clobetasol propionate has led to a significant improvement of oral lesions, also allowing reducing the dosage of systemic therapy.

## Healing evaluation by means of Optical Coherence Tomography of an extraction socket with L-PRF application in a patient at ONJ risk: a case report

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BACKGROUND: Tooth extraction has been described as the main trigger of most of osteonecrosis of the jaw (ONJ) events in patients assuming antiresorptive and antiangiogenic agents. The primary goal of dental extraction in the patient at risk of ONJ is to achieve rapidly the primary closure of the extraction socket.

In the last years the application of platelet concentrates, such L-PRF, for surgical use has widely spread, and these products are designed for the local release of platelet growth factor to stimulate tissue healing and bone regeneration, clinically reducing the healing time.

The use of Optical Coherence Tomography (OCT) is constantly increasing in medicine: it is a new biomedical device that uses light to acquire cross-sectional images of tissues with micrometer-resolution.

We report the evaluation of the wound closure by means of the OCT in a patient at risk of ONJ after a dental extraction and the application of autologous L-PRF.

METHODS: A 87-year-old partially edentulous woman was referred to our Department Surgical, Oncological and Oral Sciences, University of Palermo, for the extraction of the tooth 11, with severe mobility and root resorption.

Anamnestically, Alendronic acid assumption was reported weekly from 2007 to 2013 for osteoporosis.

The PROMaF protocol was applied, being the BP assumption >3yr (professional oral hygiene session – antibiotic prophylaxis – atraumatic tooth extraction), moreover, L-PRF (Leukocyte-Platelet Rich Fibrin, Intra-spin®, Intra-system Europa spa, Salerno, IT), was applied in the socket avoid-

ing the vestibular mucoperiosteal flaps. Patients were given standard postoperative instructions.

One week after, the sutures were removed and the wound was checked by the OCT (VivoSight, Michelson Diagnostics, Kent, UK) in order to evaluate the closure, as control site an area of healthy keratinazed mucosa was used.

One month after, another follow up visit was scheduled: x-ray was performed and OCT evaluation was repeated.

RESULTS: One week after surgery the wound shows a central depression, although the mucosa closure was achieved; there were no clincal signs of inflammation or swelling. The OCT displayed comparable images of the wound with the healthy mucosa of the patient. No healing problems were observed in the extraction socket at the next follow-up at 4 weeks.

CONCLUSIONS: Primary closure of the extraction socket is an important goal of dental extraction in patient at risk of ONJ, since the passage of bacteria from the mouth to the wound should be minimized. Lately the application of autologous platelet concentrates, as L-PRF, showed great results, reducing surgical operating times and improving wound healing. OCT imaging can produce detailed cross-sectional images of tissue of oral cavity, it could be a new non-invasive approach that will help the clinical evaluation of the wound.

Further researches are needed, but our result showed a completed closure of the extraction socket without sign of scar tissues with micrometer resolution.

## Diagnostic and therapeutic approach in a case of Langerhans cell histiocytosis with oral manifestations

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BACKGROUND: Langerhans cell histiocytosis (LCH) is a rare proliferative disorder characterized by inflammatory lesions including pathological CD1a+/CD207+/S100+ dendritic cells, lymphocytes, and macrophages mixed with eosinophils and neutrophils. The accumulation of these cells causes lytic bone lesions, skin rashes, lymphadenopathy, splenomegaly, and organ dysfunction of the pituitary, lung, liver, and bone marrow. Despite indistinguishable histology between the lesions, LCH encompasses a broad spectrum of clinical manifestations, ranging from self-limited lesions that resolve with curettage to life-threatening disseminated disease that requires intensive chemotherapy. LCH is a challenging diagnosis due to the spectrum of clinical manifestations and overlap with more common conditions.

The purpose of this report is to describe the clinical approach to a case of jaw lesion in a female adult patient with multisystem-LCH.

METHODS: A 41-year female with multisystem-LCH was sent from the Hematology department to the Odontoiatric department for an oral assessment. Medical history disclosed multifocal bone lesions (ribs), hypopituitarism and cutaneous involvement (scalp). Panoramic and intra-oral periapical radiographs demonstrated a well-defined radiolucent lesion involving the interproximal septum between the maxillary left first and second molars. The tooth 2.6 was endodontically treated and with a large cavity on the distal side. Intra-oral examination revealed gingival recession on the buccal side, deep