Giovedì, 23 settembre 2021

ore 11.10-13.00

Premio G. Vogel per il miglior caso clinico

Coordinatori: **Francesca Manfrini - Martina Stefanini**

Il programma

11.10-11.20 Introduzione *a cura dei Coordinatori*

11.20-11.40
Combined reconstructive surgical treatment of severe peri-implant and periodontal defects in a patient with Stage IV Grade B periodontitis and autoimmune diseases
Baima G., Ferrarotti F., Aimetti M.
Università di Torino-Turin University, Italy

11.40-12.00
Mucogingival prosthetic approach to treat implant failure in esthetic area
Longo E., Giovane V.*
*Università di Genova-Genoa University, Italy; * Universidad Complutense de Madrid, Madrid, Spain*

12.00-12.20
Combined restorative-mucogingival approach for the treatment of RT2/RT3 gingival recessions in a stage III grade C periodontitis patient
Palombo D., Montero E., Luengo F., Sanz Alonso M.
Universidad Complutense de Madrid, Madrid, Spain

12.20-12.40
Ectodermal Dysplasia related multiple agenesis with altered passive eruption in young patient: a multidisciplinary surgical-prosthetic approach
Rivara F.
Università di Parma-Parma University, Italy

12.40-13.00
Peri-implant bone augmentation by Sub-periosteal Peri-implant Augmented Layer (S.P.A.L.) technique combined with a bovine-derived bone block
Severi M., Trombelli L.
Università di Ferrara-Ferrara University, Italy

13.00 **Conclusioni**

Gli abstract

COMBINED RECONSTRUCTIVE SURGICAL TREATMENT OF SEVERE PERI-IMPLANT AND PERIODONTAL DEFECTS IN A PATIENT WITH STAGE IV GRADE B PERIODONTITIS AND AUTOIMMUNE DISEASES

Baima G., Ferrarotti F., Aimetti M.
Università di Torino-Turin University, Italy

Clinical evaluation/ Diagnosis

Concetta is a non-smoker 56 years old employee who came to our attention 3 years ago for her persistent "gum burning", with important inflammation and swelling especially on peri-implant areas. Since 2010, she suffers from a complex rheumatic syndrome comprising Sjögren's syndrome, fibromyalgia, interstitial cystitis, gastritis and osteoporosis. After clinical and radiographic data collection, she was diagnosed of Stage IV Grade B periodontitis, peri-implant mucositis and peri-implantitis. Specifically, the implant in position 2.4 presented severe peri-implantitis with PPD≥6 mm, BoP, SoP and MBL≥3 mm; while tooth 3.4 had deep interdental pockets with bleeding on probing, suppuration and the radiographic evidence of an intrabony defect.

Treatment goals

Treatment goals were oriented toward a stepwise approach starting from promoting behavioural changes aimed at significantly improving home oral hygiene. Non-surgical therapy was performed to obtain removal of supra and subgingival deposits and to achieve full mouth plaque and bleeding scores < 10% before surgery. Regenerative periodontal therapy was directed toward a pocket closure (post-surgery probing depth [PD] ≤ 4 mm) without BoP (Aimetti et al. 2021). Peri-implantitis treatment success was established through the criteria of Carcuac et al. (2017), i.e. PD0.5 mm. Supportive care was planned to monitor periodontal/peri-implant health and to extend treatment benefits over time.

Description of clinical/surgical procedures

Oral hygiene instructions were given and reinforced by motivational interviewing and interdental brushes advising. Symptomatic therapy for dry mouth was prescribed. Subgingival instrumentation was provided to affected dentition and implant supra-structures were retrieved. On implant in 2.4 a combined surgical approach was carried out (Schwarz et al. 2012). Briefly, the circumferential intrabony component of the lesion was treated with a reconstructive approach using bone xenograft, whereas the supra bony component was treated with implanto-plasty. Tooth 3.4 was planned for periodontal regeneration through single flap approach. After defect debridement, a combined strategy using amelogenins, collagenated bone xenograft and connective tissue graft was used to support clot stability in absence of buccal bone plate (Trombelli et al. 2017). Due to the high pro-inflammatory landscape of the patient, supportive periodontal/peri-implant care was scheduled every 4 months.

Clinical outcomes

Three years after her diagnosis, Concetta presents with FMPS/FMBS4 mm. Regarding patient-centered outcomes, she is quite satisfied about her control of gingival inflammation and she reports that the treatment significantly improved her oral health related quality of life. Periodontal and peri-implant tissues appear free of clinical signs of inflammation. Specifically, the implant in 2.4 treated with combined surgery obtained disease resolution, modest gingival recession and almost complete radiographic bone fill. Tooth 3.4 which received reconstructive periodontal surgery achieved a combination of clinically relevant clinical attachment level (CAL) gain (≥3 mm), pocket closure (post-surgery probing depth [PD] ≤ 4 mm) and radiographic bone defect fill (Trombelli et al. 2020).

MUCOGINGIVAL PROSTHETIC APPROACH TO TREAT IMPLANT FAILURE IN ESTHETIC AREA

Longo E., Giovane V.*
*Università di Genova-Genoa University, Italy; * Universidad Complutense de Madrid, Madrid, Spain*

Clinical evaluation/ Diagnosis

At first visit a 52 years old patient came to our office for pain and swelling on implant placed by another colleague 21 year before; patient was an ASA1 prophile, no history of periodontitis, he told us that previous treatment was a post extractive implant placed on upper right central incisor after a motorcicle accident and fixed prosthetic restoration on adjacent teeth; implant showed bleeding on probing, purulence, poor esthetict. Patient came with an OPT and CBCT exam and clinical evaluation revealed an incorrect coronal-apical positioning (too deep) and a vestibular-palatal wrong axis; patient wasn't happy about esthetic, she felt pain and discomfort and ask us to solve her problem; patient showed an altered passive eruption, a wide mesio-distal prosthetic space in correspondence of upper right central incisor (probably due to a diastema), and a soft tissue concavity and bone loss on implant area.

Treatment goals

Patient came with high esthetics demand. According with him , we proposed to remove the implant , the position and the clinical conditions didn't let us to restore it; we opted not to place a new implant for two reasons: patient already had 2 prepared dental abutment, and due to the previous experience he refused to place an implant again and ask us for any alternative option; so we decided to treat alterate eruption, modify the soft tissue thickness in correspondence of central incisor and to use a new ZR-CER fixed prosthetic restoration to improve esthetic; due to the color of whole area and patient's demand, the esthetic restoration consisted in ceramic veneers on adjacent teeth.

Description of clinical/surgical procedures

We inserted a new provisional prosthetic restoration to increase soft tissue quality at implant site; an envelope flap was raised from first right to first left premolar split -full-split thickness; after implant removal a double palatal pedicle graft was harvested to compensate the clinical area concavity, to create n horizontal surface and a new blood supply for a tuberosity graft (to gain verticality in soft tissues maturation); an osseous resective surgery was performed from 1.4 to 2.4 in order to enhance new soft tissue scalloped prophile; 6 months after healing 5 vertical mm were gained and edentulous area tissue thickness was acceptable and a new provisional prosthetic restoration was inserted to guide the final phases of maturation ; 4 months after second provisional restoration the new ZR-CER fixed restoration was delivered on 1.2 -1.1-2.1 and veneers were cemented on adjacent teeth.

Clinical outcomes

After final restoration insertion, patient was extremely satisfied; he showed a natural smile, with a good soft tissue blending and harmonic gingival margin; new prosthetic restorations were very stable and patient likes color and shape; 2 years after surgery we had the possibility to remove the bridge and observe the stability of grafted area that showed an increase in vertical and horizontal dimension; the possibility to treat simultaneously the flat soft tissue profile with osseous respective surgery and soft tissue gap on implant area, reduced number of surgeries and treatment time, probably less than implant placement with a bone and soft tissue reconstruction.

COMBINED RESTORATIVE-MUCOGINGIVAL APPROACH FOR THE TREATMENT OF RT2/RT3 GINGIVAL RECESSIONS IN A STAGE III GRADE C PERIODONTITIS PATIENT

Palombo D., Montero E., Luengo F., Sanz Alonso M.
Universidad Complutense de Madrid, Madrid, Spain

Clinical evaluation/ Diagnosis
A 58-years old, systemically healthy patient, presented complaining about gingival bleeding during oral hygiene. Generalised plaque accumulation combined with overt signs of gingival inflammation where present at all sextants, combined with radiographic images depicting a generalised bone loss pattern with localised images compatible with presence of infrabony defects. A diagnosis of stage III grade C periodontitis was made, combined with the identification of multiple RT2/RT3 gingival recessions in the second sextant.
Treatment goals
A comprehensive periodontal treatment was structured with the main objective to treat periodontitis, restoring adequate plaque control and adequate control of periodontal inflammation. Once control of periodontal inflammation was achieved through steps 1 to 3 of the periodontal treatment, a restorative phase was planned out, which included the combined restorative and surgical treatment of the gingival recessions in the second sextant.
Description of clinical/surgical procedures
Prior to the establishment of a new, apically displaced CEJ, through the delivery of cervical composite restorations, a frontal approach coronally advanced flap was outlined in the second sextant, combined with vertical releasing incision distal to 13 and 23 and a false recession on 22. After the elevation of a split-full-split thickness flap, and the de-epithelialization of the anatomic papillae, a free gingival graft was harvested from the hard palate and extraorally de-epithelialised. Then, the graft was applied site-specifically with simple interrupted sutures (PGA 8/0). Finally, once the flap was coronally advanced and stabilised with coronal sling sutures (PGA 6/0).
Clinical outcomes
Healing was uneventful and no specific complications were reported by the patient. Early clinical outcomes (6 months) show a satisfactory result in terms of root coverage and stability of the gingival margins.

ECTODERMAL DYSPLASIA RELATED MULTIPLE AGENESIS WITH ALTERED PASSIVE ERUPTION IN YOUNG PATIENT: A MULTIDISCIPLINARY SURGICAL-PROSTHETIC APPROACH

Rivara F.
Università di Parma-Parma University, Italy

Clinical evaluation/ Diagnosis

Ectodermal Dysplasia (ED) in a group of genetic syndromes deriving from abnormalities of the ectodermal structures. Patients affected by ED presents multiple dental agenesis, conoids and enamel modifications. Altered passive eruption is a condition that influence the correct dimension of the clinical crowns of the teeth in the aesthetic area. The patient (female, 21 y/o, affected by ectodermal dysplasia) had previously received an orthodontic treatment in order to obtain the correct alignment of the permanent dentition. The patients presented with multiple agenesis affecting 10 elements (8 premolars, elements 12-22), the presence of 5 deciduous teeth (55-75-84-85-62), 1 conoid element (52) that present a grade II mobility. A diagnostic digital smile design in combination with a CBCT and intraoral scan showed the condition of altered passive eruption of the 2nd sextant (type 1 - class B according to the Coslet classification).

Treatment goals

The patient required a complete multidisciplinary full-mouth rehabilitation in order to re-establish a proper function of the posterior area as well as the resolution of the esthetic issue in the frontal area. Oral manifestations of ectodermal dysplasia severely affected the function and the esthetic, in particular if associated to a severe altered passive eruption with lateral upper incisors agenesis. The patient (21 Y/o) could not enjoy normal social relationships because of her smile appearance.

Description of clinical/surgical procedures

After a complete periodontal evaluation and a planning phase with softwares and wax-up, the edentulous premolar areas were rehabilitated by the insertion of 8 implants with guided surgery with simultaneous transcrestal sinus lift in position 15. Altered passive eruption was treated with a combined split/full thickness flap and the osteotomy was performed by rotary and piezoelectric instruments with a DSD-guided approach to obtain a correct apico-coronal dimension of the teeth and a long-term maintainable of the crown lengthening. Considering the young age of the patient and the need for the aesthetic rehabilitation of the 2nd sextant, deciduous elements 52-62 were extracted and minimal invasive preparation were performed on the elements 13-23 to receive lithium disilicate crowns with 12-22 as ovate pontic cantilevers. Elements 11-21 were minimally prepared to receive veneers in lithium dislicate. All the implants were finalized with screw-retained single zirconia crowns.

Clinical outcomes

The patient received a complete functional/aesthetic rehabilitation. At 12 m follow up visit implants appeared integrated, vertical bone level at the site 15 was stable as well as peri-implant bone margins. Crowns lengthening in the 2nd sextant appeared stable and well-shaped. The overall aesthetic appearance of the resective surgery area and mesial/distal papillae at the elements 12-22 (ovate pontic cantilevers) were natural. Ceramic restorations were well integrated and the rehabilitation of the frontal maxillary area was obtained avoiding dental implants. All the prosthetic rehabilitations ensured a high level of hygienic maintenance. Lastly but not certainlynot least important the patient defined the rehabilitation as life changing since now she's able to smile in public and to enjoy social relationships. Her self-confidence has been boosted thus making the treatment successful not only from the biological point of view but also from the psychological point of view.

PERI-IMPLANT BONE AUGMENTATION BY SUB-PERIOSTEAL PERI-IMPLANT AUGMENTED LAYER (S.P.A.L.) TECHNIQUE COMBINED WITH A BOVINE-DERIVED BONE BLOCK

Severi M., Trombelli L.
Università di Ferrara-Ferrara University, Italy

Clinical evaluation/ Diagnosis

A 50 years-old, non-smoker, systemically healthy female patient affected by stage III grade B periodontitis (Papapanou et al. 2018) with a high risk for disease progression (Trombelli et al. 2009) presented for the rehabilitation of an edentulous area (#4.5 and #4.6). After periodontal treatment, the patient presented a bleeding on probing (BoP) score.

Treatment goals

Treatment goal was to correct the peri-implant dehiscence and provide local conditions (in terms of peri-implant tissue thickness) compatible with the stability of peri-implant tissues over time.

Description of clinical/surgical procedures

At the buccal aspect, a split-thickness flap (creating the "mucosal layer") was raised. Then, the periosteal layer was elevated from the bone crest. At the lingual aspect, a full-thickness flap was elevated. Implant sites were prepared using a computer-aided surgical guide and two tissue-level implants were placed. Implants presented a buccal dehiscence of 3 mm at #4.5 and 2 mm at #4.6. A bovine-derived xenograft block was trimmed in order to obtain a thickness of 3-4 mm and was adapted beneath the periosteal layer to cover the exposed implant surface. The periosteal layer was stabilized to the lingual flap by means of internal mattress sutures. The mucosal layer was coronally advanced to achieve primary closure of the wound. Sutures were removed at 2-weeks post-surgery. At 6 months following implant placement, a re-entry procedure for implant exposure was performed. A free gingival graft was placed. Final restoration was screwed 4 weeks after exposure.

Clinical outcomes

At the 6-months re-entry, previously exposed implant surfaces were completely covered by new hard tissue, and peri-implant buccal tissue thickness ≥ 3 mm was present at the most coronal portion of both implants. The use of a free gingival graft at re-entry created an adequate (≥ 2 mm) band of keratinized tissue.