

PERI-IMPLANTITIS: A CASE REPORT AND LITERATURE REVIEW

G. BRUNELLI¹, F. CARINCI², I. ZOLLINO²,
V. CANDOTTO², A. SCARANO³, D. LAURITANO⁴

¹*Dental Clinic, University of Cagliari, Cagliari, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Peri-implantitis is an inflammatory disease involving mucosa and alveolar bone occurring around dental fixtures. In determining severity and extent of peri-implantitis, the diagnostic process consists to score the damage of periodontal tissues, as expressed by probing depth and loss of clinical attachment. A 54-year-old female underwent to insertion of two implants in the symphyseal area. After one year, one of these became mobile with clinical signs of inflammation: there was no suppuration, an increased probing depth (3-4 mm), and high plaque. A peri-apical film showed the presence of radiolucency in the most coronal part of the implant and a granulomatous tissue was present upon removal on the most coronal part of the implant. The microscopically examination showed the presence of connective tissue on both sides of implant. No inflammatory infiltrate was present in the connective tissue. A rim of osteoblasts was observed on bone margins. The bio-film development on dental implants surface plays an important role in the onset of peri-implantitis. Therapy proposed is similar to periodontitis treatment, although implant surface facilitates the adherence of bio-film bacteria and makes difficult to treat it so that the final solution is the fixture removal in most cases. Here a clinical case is reported, the histological findings described and the pertinent literatures discussed.

SEM EVALUATION OF 10 INFECTED IMPLANTS RETRIEVED FROM MAN

G. BRUNELLI¹, F. CARINCI², I. ZOLLINO²,
V. CANDOTTO², A. SCARANO³, D. LAURITANO⁴

¹*Dental Clinic, University of Cagliari, Cagliari, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Peri-implant disease represents a collective term to describe inflammatory reactions in the tissues surrounding an implant. Results from clinical and experimental studies revealed that the tissue response to plaque formation at teeth and dental implants is similar. However, while peri-implantitis and periodontitis have many clinical features in common, structural differences in supporting tissues between implants and teeth may influence host response to infection. Here a SEM evaluation was reported to evaluate quality of bacteria and the pertinent literature discussed. Ten implants had to be removed for progressive marginal bone loss during follow-up period. The implants surface was examined under a Scanning Electron Microscopy (SEM LEO, Cambridge, England) with tilt angles ranging from 10 to 45 degrees. SEM evaluations were performed by three independent observers who expressed an estimate of bacterial amount of three different areas: supra-crestal, sub-crestal and screw threads. Plaque formation and gingival inflammation were observed into the junctional epithelium-to-implant contacts, with also active or previous bone resorption. In peri-implantitis the implant surface facilitates the adherence of the biofilm bacteria and complicates its elimination. Most of chemical and mechanical devices are not able to completely remove bacteria from implant surface especially if they are enclosed in calcified areas. Bacteria determine an inflammatory process which determines bone resorption around fixtures and thus implant mobility occurs. Identification of bacteria types is of paramount importance in order to perform specific therapy to eliminate peri-implant colonies.

PERIORAL REJUVENATION AND LIP AUGMENTATION WITH HYALURONIC ACID

A. SCARANO¹, B. PALMIERI², G. L. BERTUZZI³, A. DI CRISTINZI¹,
F. CARINCI⁴, D. LAURITANO⁵

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

²*Medical School, University of Reggio-Emila*

³*Medical School, University of Tor Vergata, Rome*

⁴*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

⁵*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

In the cosmetic medical area facial rejuvenation with permanent or absorbable fillers requires not only biochemical and biological informations about the molecules used, but also insights into the ageing anatomy and physiology. This article reviews the results of 46 cases undergone to lip augmentation and perioral rejuvenation in the last 1 year. A total of 46 consecutive female patients, between 27 and 60 years of age, with type I and type II lips by Fulton classification were recruited to the study. In all patients both lips were treated. The product was a cross-linked hyaluronic acid (ALIAZIN® FL-LIP S IBSA-Lodi, Italy) injected in a single session. The aesthetic evaluation was performed at 3, 6, 9, and 12 months after injection. As to the injection technique the filler has been implanted withdrawing the needle while injecting along the lips margins. After 3 months, 87.88% of participants were satisfied or very satisfied with their treatment result. After 6, 9 and 12 months, 52.73%, 40.67% and 10.67% of participants, respectively, were satisfied or very satisfied. The investigator evaluation rates of acceptable effect (score of 2 or 3) were 96.65%, 40.43%, 28, 39 and 16.79% at 3, 6, 9 and 12 months, respectively. Filling results lasted approximately 5 months with a gradual decline to baseline. The procedure was very well tolerated with only few, mild adverse reactions that resolved spontaneously. In conclusion during first years of clinical use, cross-linked Hyaluronic Acid was proven to be reliable filler preferred by cosmetic doctors an effective and safe facial soft tissue expander and predictable treatment for lip augmentation.

IMMEDIATELY LOADED SMALL-DIAMETER DENTAL IMPLANTS: EVALUATION OF RETENTION, STABILITY AND COMFORT FOR THE EDENTULOUS PATIENT

A. SCARANO¹, G. MURMURA¹,
F. CARINCI², D. LAURITANO³

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Studies have shown that mandibular implant overdentures significantly increase satisfaction and quality of life of edentulous elders. Improved chewing ability appears to have a positive impact on nutritional state. Forty edentulous subjects received four permucosal mini-implants for overdentures in the inter-foramina region of the mandible. Almost all participants were still satisfied with their overdentures. Participant satisfaction was concerning retention and stability of the mandibular overdenture. A micro invasive technique was adopted, without open flap and performed in one surgical step; this technique can be used also in the so-called "high-risk" patients (anticoagulant therapy, diabetes, etc.) the advent of mini implants is in many cases a good clinical alternative to the use of larger diameter implants, in that they enable to reduce surgical time, bleeding, post operative comfort and healing time. The results suggest that a mandibular overdenture retained by 4 mini implants may be the best treatment strategy for edentulous people with atrophic ridges.

TREATMENT OF PERIORAL RHYTIDES WITH VOLTAIC ARC DERMOABRASION

A. SCARANO¹, D. D'ANDRIA¹, G. FIPPI¹, F. DI CARLO¹
F. CARINCI², D. LAURITANO³

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Perioral rhytids can be successfully treated with various methods, including dermabrasion, carbon dioxide laser, filler and chemical peels. Ablative resurfacing is typically used to treat rhytides, dyschromia, and scarring. A novel electrosurgical technology was used in this study for treatment of perioral rhytides. The authors treated 15 patients (11 female and 4 male) for perioral rhytides with Voltaic arc dermoabrasion technique. Patient ages ranged between 30 and 65 years and the majority (90%) of these perioral areas had class II and III wrinkle scores. Voltaic arc dermoabrasion (PLEXR, GMV s.r.l. Grottaferrata, Italy) were used to remove the keratinized layer for point perioral area. Treatment is minimally painful and in the authors' experience require no anesthesia. No discomfort should be expected once the voltaic arc dermoabrasion treatment is concluded. The perioral dermis appears as a pale, erythematous, dull surface. Bleeding is not seen unless excessive abrading occurs with the saline-moistened gauze. No hyperpigmentation, hypopigmentation, erythema, ecchymosis, pain, itching, outbreaks of herpes, infectious processes and scarring was observed. In conclusion fine rhytides, particularly in the perioral areas may be completely eradicated with voltaic arc resurfacing; deeper creases are also improved, probably secondary to a general tightening effect.

FULL-FACIAL REJUVENATION WITH AUTOLOGOUS PLATELET-DERIVED GROWTH FACTORS

A. SCARANO¹, G. IEZZI¹, A. DI CRISTINZI¹, G.L. BERTUZZI²,
F. CARINCI³, D. LAURITANO⁴

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

²*Medical School, University of Tor Vergata, Rome, Italy*

³*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic, University Milano Bicocca, Italy*

The platelets used in oral, maxillofacial and plastic surgery are generally grouped as concentrated platelet rich plasma. The general principle of production consists of a centrifugation, making it possible to eliminate red blood cells, then acellular plasma, to preserve only the concentrated platelets. Aim to evaluate the efficacy of a three session of injections of autologous platelet-derived growth factors for full-face rejuvenation including the perioral and periorbital regions; 16 patients female between 27 and 60 years of age, were admitted to facial rejuvenation procedure. All these patients showed mainly class II rhytides. Six patients had rejuvenation of only the perioral region (five patients had class II rhytides and the other patient had class III rhytides). Another five patients had rejuvenation of only the periorbital region (two patients with class I rhytides, the other three had class II rhytides). Approximately 0,2 cc of autologous platelet-derived growth factors was produced per tube; this activated suspension was then injected intradermally or subdermally below the perioral and periorbital regions through 30 and 27 gauge needles, respectively, as needed to achieve the most optimal correction of the rhytides with mainly a linear threading technique. All patients demonstrated some improvement. 92.88% of participants were satisfied or very satisfied with their treatment result. The investigator evaluation rates of acceptable effect (score of 2 or 3) were 76.65%. The results lasted approximately 6 months with a gradual decline to baseline. Autologous platelet-derived growth factors in one treatment session for three months can achieve effective full-face skin rejuvenation, with effects on both the epidermis and dermis.

ONE-PIECE IMPLANTS INSTALLED IN RESTORED MANDIBLE: A RETROSPECTIVE STUDY

S. FANALI¹, F. CARINCI², I. ZOLLINO²,
C. BRUGNATI³, D. LAURITANO⁴

¹*Department of Oral Science, Nano and Biotechnology, University "G. D'Annunzio", Chieti, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Dentistry and Maxillofacial Surgery, Don Orione Institute, Bergamo, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

One-piece implants became more and more popular in the last few years. They incorporate the trans-mucosal abutment as an integral part of the implant. Since no report specifically focus on one-piece implants inserted in mandible is available, a retrospective study was performed. Eleven patients (7 females and 4 males) were enrolled in the present study. A total of 93 one-piece implants (Diamond, BIOIMPLANT, Milan, Italy) were inserted. Cox analysis was used to detect if any of the studied variables (i.e. diameter, length, replaced tooth position and welding) has an impact both on failures (SVR, i.e. lost fixtures) and/or on success (SCR, i.e. crestal bone resorption around implants lower than 1.5 mm). In our series SVR and SCR were 100 (i.e. no implant lost) and 97.8 (i.e. 2 failed implants), respectively. Cox analysis demonstrated that no studied variables (i.e. diameter, length, replaced tooth position and welding) have direct impact on survival (i.e. lost implants) as well as on clinical success (i.e. crestal bone resorption) ($p > 0.5$). In conclusion one-piece implants are reliable devices for mandible rehabilitation.

SCHWANNOMA OF THE POSTERIOR TONGUE IN A THIRTEEN-YEAR OLD CHILD

A. SCARANO¹, G. MURMURA¹, L. ARTESE¹,
F. CARINCI², D. LAURITANO³

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Schwannoma is a benign tumor that originates from the presence of Schwann cells of the peripheral nerves. They are usually asymptomatic, do not recur, and malignant transformation is rare. The tongue is the most common site, followed by the palate, floor of mouth, buccal mucosa, lips, and jaws. It can present itself at any age. Usually, this lesion is not taken into account during clinical practice and the differential diagnosis includes numerous benign neoformations based on epithelial and connective tissues. We describe a clinical case of Schwannoma located in the tongue of a 13-year-old patient. On intraoral examination, a submucosal nodular lesion was observed, located in the left tongue and was covered with normal appearing mucosa and measuring approximately 3 x 2 cm. The lesion was moderately firm and was not fixed to the surrounding tissues. There was no pain on touch. From these data the provisional diagnosis was established as some benign soft-tissue neoplasm process. The lesion was excised with a small border of clinically uninvolved surrounding tissue, intraoral and patient evolved satisfactorily, with no recurrence six years after surgery. The histopathological diagnosis of benign schwannoma was confirmed. The patient has been followed up for 6 years and there has been no evidence of recurrence.

SURFACE ANALYSIS OF FAILED ORAL TITANIUM IMPLANTS AFTER IRRADIATED WITH ErCR:YSGG 2780 LASER

A. SCARANO¹, B. SINJARI¹, D. DI IORIO¹, G. MURMURA¹,
F. CARINCI², D. LAURITANO³

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Peri-implantitis may occur because of biologic or mechanical factors. They can be treated by a variety of methods. Aim of the present study was to evaluate implant surface of failed oral titanium implants after irradiated with ErCR:YSGG 2780 laser. This study comprised 45 implants removed for peri-implantitis reasons. The implants were divided into two groups: group I (Control): 22 non-irradiated implants, group II (Test): 23 irradiated implants. Immediately after extraction, the second group's implants were irradiated with an ErCR:YSGG 2780 laser (Waterlase MD Turbo-Biolase). Control and test implants were processed with SEM analysis. At higher magnification in the coronal portion no bacteria were found on test implant surface. At low magnification, there was a variation in the number of fields of deposit among the non-irradiated implants and different portions on the same implants. At higher magnification, deposits were identified as connective tissue in apical portion and bacteria or others, in coronal portion of control implants. In conclusion, ErCR:YSGG 2780 laser is recommended to be used in implant surface detoxification without any surface alteration, using the experimental conditions.

A RETROSPECTIVE STUDY ON 83 ONE-PIECE IMPLANTS INSTALLED IN RESORBED MAXILLAE

S. FANALI¹, F. CARINCI², I. ZOLLINO²,
C. BRUGNATI³, D. LAURITANO⁴

¹*Department of Oral Science, Nano and Biotechnology, University "G. D'Annunzio", Chieti, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Dentistry and Maxillofacial Surgery, Don Orione Institute, Bergamo, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

One-piece implants incorporate the trans-mucosal abutment facing the soft tissues as an integral part of the implant. The interface between the trans-mucosal component and the implant is generally located in the neighborhood of the alveolar bone level. One-piece implant are usually welded together and immediately loaded. Since no report on one-piece implants placed in maxilla is available, a retrospective study was performed. Twelve patients (5 females and 7 males) were enrolled in the present study. A total of 83 one-piece implants (Diamond, BIOIMPLANT, Milan, Italy) were inserted. Cox analysis was used to detect if any of the studied variables (i.e. diameter, length, replaced tooth position and welding) has an impact both on failures (SVR, i.e. lost fixtures) and/or on success (SCR, i.e. crestal bone resorption around implants lower than 1.5 mm). In our series SVR and SCR were 86.7 (i.e. 11 implants lost) and 97.2 (i.e. 2 failures out of the remaining 72 implants), respectively. Statistical analysis demonstrated that replaced tooth position has a direct impact on survival (i.e. lost implants) with a worse survival for premolars and molars (80.1 % survival) respect to incisors and canine (92.7% survival) ($p=0.03$). No studied variables (i.e. diameter, length, replaced tooth position and welding) have impact on clinical success (i.e. crestal bone resorption). Since maxilla has a lower bone quality respect to mandible, we concluded that one-piece implants are reliable devices for maxilla rehabilitation.

HAEMOSTASIS CONTROL IN DENTAL EXTRACTION WITH CALCIUM SULPHATE: A CASE SERIES

A. SCARANO¹, A. QUARANTA², B. FERAGALLI¹,
A. DI CRISTINZI¹, F. CARINCI³, D. LAURITANO⁴

¹*Department of Oral Science, Nano and Biotechnology University of Chieti-Pescara, Italy*

²*Dental School, University of Ancona, Italy*

³*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

Dental treatment performed in patients receiving continuous oral anticoagulant drug therapy is becoming increasingly common in dental offices. For these patients it is imperative to carry out careful anamnesis, as well as a multi professional clinical evaluation with regard to the risk and control of hemorrhagic or thromboembolic episodes. The aim of this study was to assess the haemostatic efficacy and safety of the topical use of Calcium sulfate (CaS) in the setting of dental surgery. Following the approval from of the Local Research Ethics Committee (CaS) as a haemostatic agent in Dentistry. No patient had wound infection and the healing process appeared to be normal. CaS is useful for the local hemostasis and wound healing in periodontal surgeries. In conclusion, the use of CaS controlled the bleeding from inside the extraction socket producing instantly a very good haemostasis.

THE BIOPHYSICAL STIMULATION OF OSTEOGENESIS: A REVIEW

V. SOLLAZZO¹, F. CARINCI², D. LAURITANO³

¹*Orthopedic Clinic, University of Ferrara, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

The use of biophysical methods to promote osteogenesis have been successfully used since 30 years in everyday orthopedic practice to enhance osteogenesis in such diseases as delayed unions, non unions, avascular necrosis of the femoral head. It is also used in the treatment of fracture at risk of non union and to favor spinal fusion. Biophysical therapy can be performed using inductive, capacitive, mechanic or implanted devices. The mechanism of action of physical stimuli is at a membrane level where the activation of calcium channels determines the enhancement of cell proliferation and the production of growth factors. Biophysical therapy should be performed using devices and modalities described in the literature. The biophysical stimulation of osteogenesis is effective in the enhancement of the biology of fracture healing in presence of a correct orthopedic treatment in terms of good alignment and stabilization at the fracture site. The choice of which method have to be used it depends on the segment of bone that has to be treated, the type of fracture and if it is possible to apply the device on the skin. The presence of internal or external fixation devices is not a contraindication.

VERSAJET HYDROSCALPEL: A NEW SURGICAL APPROACH FOR THE TREATMENT OF GIANT CONGENITAL MELANOCYTIC NEVUS IN THE FIRST MONTH OF LIFE

C. RIBERTI¹, F. CARINCI², I. PEZZINI¹, L. MORETTI¹, M. CANDIANI¹,
V. LOCONTE¹, I. ZOLLINO², C. BLEVE³, A. FRANCHELLA³, G. BRUNELLI⁴

¹*Department of Surgery, Operative Unit of Plastic and Reconstructive Surgery, Sant'Anna Hospital, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Operative Unit of Pediatric Surgery, Sant'Anna Hospital, Ferrara, Italy*

⁴*Dental Clinic, University of Cagliari, Cagliari, Italy*

We describe a case of giant congenital melanocytic nevus of the back in one month child old. We utilized Versajet, a medical device that uses the force of the water jet, usually to remove devitalized tissues.

THYROGLOSSAL DUCT CYSTS: A RETROSPECTIVE STUDY

A. FRANCHELLA¹, S. PELLEGRINELLI¹, F. CARINCI²,
I. ZOLLINO², G. CARNEVALI², V. CANDOTTO²,
S. FRANCHELLA², G. DENOTTI³, V. PIRAS³, G. BRUNELLI³

¹*Operative Unit of Pediatric Surgery, Sant'Anna Hospital, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Dental Clinic, University of Cagliari, Cagliari, Italy*

The thyroglossal duct cyst (TGDC) represents a retention cyst which arises in a patent portion of the vestigial thyroglossal tract and occurs anywhere in the midline along its pathway from the base of the tongue to the region between the hyoid bone and the thyroid gland. In the period between January 2001 and December 2009, 32 patients underwent to TGDC treatments at the Pediatric Surgery Unit, S Anna Hospital, Ferrara, Italy. Patients included 15 (46.8%) females and 17 (53.2%) males. Age ranged from 2 to 17 years with a mean value of 5.7 at the time of admission. TGDC were treated with anterior neck approach under general anesthesia. Only one case (3.1%) had a recurrence since it was incompletely removed. The diagnosis was made since TGDC had suppuration. The most effective surgical procedure was originally described by Sistrunk in 1920 and modified in 1928. This technique is based on the removal of the central portion of the hyoid bone with a core of tissue from the hyoid bone up to the foramen caecum and of some muscle surrounding the proximal ductules. The greatest opportunity for cure is surgery at initial non-inflamed presentation. Once infected, surgical excision is more difficult and recurrence will increase. Our series confirm what reported in the English literature since the only relapsed case was diagnosed during suppuration.

INFANTILE HEMANGIOMAS OF THE FACE: A CASE SERIES EVALUATION

A. FRANCHELLA¹, S. PELLEGRINELLI¹, F. CARINCI²,
I. ZOLLINO², G. CARNEVALI², V. CANDOTTO²,
S. FRANCHELLA², G. DENOTTI³, V. PIRAS³, G. BRUNELLI³

¹*Operative Unit of Pediatric Surgery, Sant'Anna Hospital, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Dental Clinic, University of Cagliari, Italy*

Infantile hemangioma is the most common benign soft part tumor in childhood affecting 1-2 % of neonates and 10-12% of children up to the first year of life. It seems to be more frequent in females sex and in premature. In the period between July 2005 and December 2010, 36 patients underwent to infantile hemangioma treatments at the Pediatric Surgery Unit, S Anna Hospital, Ferrara, Italy. Patients included 18 females and 18 males. Age ranged from 3 months to 14.5 years with a mean value of 6.4 years at the time of admission. There were 22 hemangiomas, 8 lymphangiomas and 6 spider naevi. 10, 16 and 10 were located in the lower, middle and upper third of the face. All were treated with surgery: 28 under general anesthesia, 4 under local anesthesia and 4 under sedation. There was one relapse in the right zygoma. Treatment of hemangiomas remains extremely controversial because there are a wide range of outcomes for hemangiomas from fully resolved to disfiguring scars, to life-threatening obstructions, and it's extremely hard to predict whether a given lesion is benign or whether it will impair the patient. Systemic corticoids, long considered as the therapy of choice have hard to control insidious adverse effects, beside response. The use of pulsed laser to treat uncomplicated hemangiomas had limited significant benefit. Surgical excision can be performed in selected cases.

HEAD AND NECK PYOGENIC GRANULOMAS IN CHILDREN

A. FRANCHELLA¹, S. PELLEGRINELLI¹, F. CARINCI², I. ZOLLINO²,
G. CARNEVALI², V. CANDOTTO², S. FRANCHELLA²,
G. DENOTTI³, V. PIRAS³, G. BRUNELLI³

¹*Operative Unit of Pediatric Surgery, Sant'Anna Hospital, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Dental Clinic, University of Cagliari, Italy*

Pyogenic granuloma (PG) is a benign, acquired, vascular neoplasm of the skin and mucous membranes. Papules develop most commonly on the head, neck, and extremities, especially the fingers and periungual area. Minimal trauma often triggers profuse bleeding that is difficult to control, leading to a visit to the emergency room. Treatments vary and include surgical excision with primary closure, shave excision at the base. Recurrences and development of multiple satellite lesions after therapy can achieve. In the period between January 2008 and December 2010, 32 patients underwent to PG excision at the Pediatric Surgery Unit, S Anna Hospital, Ferrara, Italy. Patients included 12 (37.5%) females and 20 (62.5%) males. Age ranged from 5 months to 15 years with a mean value of 6 years at the time of admission. 6, 9, and 10 PGs were located in the lower, middle and upper third of the face, respectively. 7 PGs were in the neck. PGs were treated with surgical excision: 24 under general anesthesia, 3 under sedation and 5 under local anesthesia. Many different treatments have been used for PG, with variable success rates. The several approaches have been: excisional surgery, cryosurgery, curettage, laser, injection of ethanol or corticosteroid and sodium tetradecyl sulfate sclerotherapy. However, full-thickness surgical excision has been considered as the standard treatment. In our series all PGs were surgically removed and no recurrences were detected thereafter. Consequently surgical treatment is an effective method to treat this lesion.

DERMOID CYSTS: A CASE SERIES OF PEDIATRIC PATIENTS

A. FRANCHELLA¹, S. PELLEGRINELLI¹, F. CARINCI², I. ZOLLINO²,
G. CARNEVALI², V. CANDOTTO², S. FRANCHELLA²,
G. DENOTTI³, V. PIRAS³, G. BRUNELLI³

¹*Operative Unit of Pediatric Surgery, Sant'Anna Hospital, Ferrara, Italy*

²*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

³*Dental Clinic, University of Cagliari, Italy*

Dermoid cysts (DCs) are benign lesions arising from entrapment of epithelial rests during embryogenesis. They rarely present in children, and are usually diagnosed during the 2nd or 3rd decade of life. In the period between January 2001 and December 2010, 60 patients underwent to DCs treatments at the Pediatric Surgery Unit, S Anna Hospital, Ferrara, Italy. Patients included 29 females and 31 males. Age ranged from 7 months to 16.8 years with a mean value of 3.2 years at the time of admission. Thirty-four, 13 and 1 were located in the upper, middle and lower third of the face. Twelve were in the neck. All were treated with surgery under general anesthesia. No recurrences were detected in the follow-up period. DCs usually present as a non-painful swelling in the lines of fusion. More rarely the cyst may be asymptomatic until it presents with apparent enlargement or with inflammatory symptoms. An ultrasound scan is commonly used as the first choice to investigate the lesion. With CT, a DC has characteristic features: it is typically well-defined and has an enhancing wall and a non-enhancing lumen. Irregular dense areas presumably correspond to clumping of epithelial debris within the lumen of the cyst. The treatment of these lesions consists in complete extirpation. In conclusion, DCs are rare disembryogenetic lesions that may occur at the head and neck area, particularly in the orbit and in the floor of the mouth.

LAB[®]-TEST 1: PERI-IMPLANTITIS AND BACTERIOLOGICAL ANALYSIS

F. CARINCI¹, A. GIRARDI², A. PALMIERI¹, M. MARTINELLI², L. SCAPOLI²,
A. AVANTAGGIATO¹, G.M. NARDI³, D. LAURITANO⁴

¹*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

²*Department of Histology, Embryology and Applied Biology, Centre of Molecular Genetics, CARISBO Foundation, University of Bologna, Bologna, Italy*

³*Department of Odontostomatologic and Maxillofacial Sciences, La Sapienza University, Rome, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic, University Milano Bicocca, Milan, Italy*

**LAB[®]-TEST 2:
MICROFLORA AND PERIODONTAL DISEASE**

F. CARINCI¹, A. GIRARDI², A. PALMIERI¹, M. MARTINELLI², L. SCAPOLI²,
A. AVANTAGGIATO¹, G.M. NARDI³, D. LAURITANO⁴

¹*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

²*Department of Histology, Embryology and Applied Biology, Centre of Molecular Genetics, CARISBO Foundation, University of Bologna, Bologna, Italy*

³*Department of Odontostomatologic and Maxillofacial Sciences, La Sapienza University, Rome, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*

**LAB[®]-TEST 3:
GENETIC SUSCEPTIBILITY IN PERIODONTAL DISEASE**

F. CARINCI¹, A. GIRARDI², A. PALMIERI¹, M. MARTINELLI², L. SCAPOLI²,
A. AVANTAGGIATO¹, G.M. NARDI³, D. LAURITANO⁴

¹*Department of D.M.C.C.C., Section of Maxillofacial and Plastic Surgery, University of Ferrara, Ferrara, Italy*

²*Department of Histology, Embryology and Applied Biology, Centre of Molecular Genetics, CARISBO Foundation, University of Bologna, Bologna, Italy*

³*Department of Odontostomatologic and Maxillofacial Sciences, La Sapienza University, Rome, Italy*

⁴*Department of Neurosciences and Biomedical Technologies, Dental Clinic,
University Milano Bicocca, Milan, Italy*