

Abstracts of the 31st National Conference of the Hellenic Association of Oral & Maxillofacial Surgery

NASAL RECONSTRUCTION AFTER SKIN CANCER SURGERY; PRESENTATION OF TREATMENT MODALITIES FOR MEDICALLY COMPROMISED PATIENTS

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Abstract: Nasal reconstruction after surgical excision of non-melanoma skin cancer defects can be a challenging condition for every head and neck surgeon. There are certain technical difficulties that arise from the tissue deficit and the area that a locoregional flap can cover. What is more, patients with a compromised medical history cannot always receive a surgical management under general anaesthesia, limiting even more the defect reconstruction. The aim of the present study is to present two patients that were treated under local anaesthesia for advanced basal cell carcinomas of the nose, with modifications of paramedian and hemi-nasal flaps that provided excellent surgical and aesthetic outcomes, despite the limits of the surgical modality.

Keywords: nasal reconstruction, basal cell carcinoma, compromised patients.

IS ASEPTIC BONE NECROSIS A CAUSE FOR EARLY IMPLANT FAILURE IN PATIENTS WITH METAL ALLERGIES? – A CASE REPORT AND LITERATURE REVIEW

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Abstract: Given the widespread use of titanium and its alloys in dental implantology, implant failures will most likely arise and there will still remain gray areas with regard to the biology and physiology of the interaction of dental implant alloys and the host. Medical literature is abundant with reports of aseptic prosthetic loosening following arthroplasty that may be attributed to many reasons, yet the most important factor appears to be the periprosthetic osteolysis due to unbalanced homeostasis of bone formation and resorption. Although it was previously believed to be a simple mechanical complication resulting from the instability of the implant, it is now widely accepted that particulate implant debris induces local inflammation and osteolysis. The purpose of the current study is to report the atypical and unexpected early implant loss of a titanium implant in an otherwise healthy 60-year-old patient with a previously undiagnosed nickel, palladium, and cobalt allergy. After verification by Melisa test the patient was successfully treated with a ceramic implant. A literature review was performed, which demonstrated that there is abundant scientific evidence that suggests an established correlation between the different metal alloys and peri implant aseptic bone loosening leading to failure of implant osseointegration.

Keywords: Metal allergy, Melisa test, Zirconia implant

“STICKY TOOTH”. SOCKET PRESERVATION BY USING AN AUTOLOGOUS DENTINE GRAFT IN COMBINATION WITH PLASMA RICH FIBRIN. CASE REPORT AND A TWO YEARS FOLLOW UP

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Introduction: The present report describes the preservation of two post extraction sockets in the same 75 years old female patient by using an autologous dentin graft of the two extracted teeth and the clinical-radiographic evaluation after two years. Case presentation: the extracted teeth (33,43) were properly processed due to the protocol and device of Smart Dentin Grinder

of KometaBio company as an autologous dentin graft and mixed with the S-PRF (platelet rich fibrin) as a "sticky tooth" and filled the post extraction sockets for preservation. The sockets covered by PRF membranes and simple sutures were placed. The clinical and radiographic evaluation of the patient one and two years after the placement of the autologous dentin graft showed the stability and the complete osseointegration of the graft without any complication. Results: although the "sticky tooth" method is new, its efficiency in the socket preservation and the quality of the new bone formation is documented by the literature. The advantages of this method are: financial cost reduce, patient's acceptance, storage feasibility for future use of the dentin graft and better quality of new formed bone. The disadvantages compared to the usual method of placing other grafting materials are probably the purchasing cost of the device and the needed time for the preparation and production of the graft. Compared to the autologous bone graft it seems to have the same osseo-inductive and osseo-compatible features, without the trauma of the donor site, resulting as a promising grafting material.

CLINICAL APPLICATIONS OF SAFESCRAPER® IN MAXILLARY SINUS FLOOR ELEVATION AND RIDGE AUGMENTATION

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Introduction. Although there is a wide variety of bone grafting materials for the augmentation of the deficient alveolar ridge, autogenous bone is still considered to be the gold standard. There are various methods for harvesting autologous bone grafts. Among these, Safescraper® is conveniently used as a harvesting device of autogenous cortical bone in oral Implantology and reconstructive surgery, ensuring high volumes of grafting material with a minimally invasive and predictable procedure.

Purpose. The purpose of this presentation is to showcase the clinical applications of Safescraper® in various augmentation procedures and to review the existing literature for the evidence supporting its application in clinical practice.

Materials and Methods. In the presented cases, Safescraper® provided surface-derived autogenous bone graft deriving from the maxillary tuberosity, the zygomatic buttress, the lateral sinus wall, the pyriform aperture of the nose, the external oblique ridge and the mandibular symphysis. The collected autogenous bone has been mixed either with xenograft, or autologous venous blood, or platelet-rich fibrin and used in procedures such as:

- Maxillary sinus floor elevation,
- Reconstruction of periimplant defects,
- Reconstruction of alveolar ridge defects with onlay autogenous blocks, or bone rings,
- Ridge augmentations using resorbable collagen membranes, titanium-reinforced non-resorbable membranes or titanium meshes,
- Ridge augmentations using the Khoury technique.

Results. Satisfactory amounts of autogenous bone have been harvested in all cases. The bone harvesting procedure was swift, reliable and devoid of any complications.

Conclusion. Safescraper® is an extremely useful, cost-effective and minimally invasive device for collecting bone to adequately cover the needs in autogenous grafts everyday clinical practice.

A NOVEL CRESTAL PROTOCOL FOR THE APPLICATION OF DENATURED ALBUMIN IN MINIMALLY INVASIVE IMPLANTOLOGY AND SINUS PIEZOSURGERY - PRELIMINARY RESULTS OF A PILOT STUDY

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Abstract: Sinus-Floor-Elevation surgical procedure has been considered the dominant treatment protocol towards posterior maxillary atrophy and implant rehabilitation. Nevertheless, the high incidence of postoperative sinusitis and intra- and post-operative complications, such as Schneider's membrane perforation in 10-55% of patients, constitute it an invasive approach of high morbidity (mainly adopted for open-lateral-window version).

The innovative crestal approach termed PAC-Protocol (Piezo-Alb-CGF) comprises: a) Minimally invasive transcresal-flapped or flapless-approach, b) Piezo-surgery preparation by Sinus Intralift™ Technique (Satelec-France), c) Schneiderian membrane cavitation by hydrodynamic membrane detachment-elevation, d) CGF-matrix into the sinus, e) Denatured Albumin, mixed together with Autologous Concentrated Growth

Factors (CGF), an Autologous-Osseoinductive-Slow-Absorption-Graft (of 6 to 8 weeks) placed (within the interspace between membrane & sinus bone floor) as a scaffold, f) Bone grafting (optional), (g) Implantation, (h) Wound closure, evaluation for next 4-6 months postop. The clinical sample comprises five (5) patients (2 women – 3 men) with an average age of 55.6 years and an average residual-bone-height of 3.9 mm. A total of eight (8) implants were placed, showing sufficient to high primary stability without any complications. CBCT and panoramic x-rays also showed new bone formation and complete osseointegration.

The Albumin-CGF regenerative properties promote new bone formation, eliminate sinus surgery's high-risk and postoperative patient morbidity, and reduce the healing period (4-6 months) compared to the current surgical procedures. PAC-Protocol provides uniform-safe-hydraulic membrane lift and bi-cortical implant fixation due to piezo-surgery under-preparation of only 2.8mm in diameter, even in cases with a residual bone height below 6mm to avoid an open lateral-window approach.

Keywords: Regenerative PAC-Protocol, Sinus Floor Elevation, Flapless Piezosurgery, Denatured Albumin, Concentrated Growth Factors, Transcrestal Approach, AnyRidge

IMMUNOMODULATORY EFFECTS OF ND:YAG (1064 NM) AND DIODE LASER (810 NM) WAVELENGTHS TO LPS-CHALLENGED HUMAN GINGIVAL FIBROBLASTS

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Abstract: Objective: Human gingival fibroblasts (hGFs) are involved in inflammatory responses to bacteria by recognizing pathogen-associated molecular patterns. In search of host modulation strategies to increase LPS tolerance, Low level laser therapy (LLLTT) has been suggested as an alternative treatment that reduces periodontal tissue inflammation. In this study, we investigate whether 810 nm (diode) and 1064 nm (Nd:YAG) laser

wavelengths, modulate pro-inflammatory responses to LPS challenges in hGFs.

Design: Primary hGFs were challenged with Porphyromonas gingivalis LPS and irradiated with either Diode (810 nm) or with Nd:YAG (1064 nm) lasers. Cell cultures were examined for cell proliferation by MTT assay and IL-6 and IL-8 expression by qPCR at 24, 48 and 72 h. IL-6 and IL-8 protein levels were detected via ELISA.

Results: Naïve hGF populations irradiated with both Diode 810 nm and Nd:YAG 1064 nm lasers demonstrated cellular proliferation ($p < 0.05$), but LLLT did not affect cellular viability in LPS-challenged cells. IL-6 and IL-8 gene expression levels revealed significant anti-inflammatory effects of irradiation with both examined wave-lengths on hGFs challenged with P. gingivalis LPS. Protein levels of these cytokines were increased by LPS challenge. Treatment with LLLT inhibited this increase for both wavelengths evaluated in the study at a statistically significant level particularly for the first 48 h.

Conclusions: The present study demonstrates a modulatory effect of LLLT using both 810 nm diode and Nd:YAG 1064 nm lasers in gingival fibroblasts by decreasing the production of IL-6, IL-8 in response to LPS.

LATERAL CEPHALOMETRIC CHANGES AND STABILITY OF BSSO VERSUS IVRO FOR MANDIBULAR SETBACK SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS.

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Abstract: The aim of this review is to examine the lateral cephalometric hard tissue changes and the stability of the end result of bilateral sagittal split osteotomy

(BSSO) and the intraoral vertical ramus osteotomy (IVRO) techniques for mandibular setback surgery. A systematic review of MEDLINE (via PubMed), Scopus, and Cochrane Library databases (last search date: August 22nd, 2021) was performed according to the PRISMA guidelines. Only studies that directly compare BSSO and IVRO were included. Random-effects model meta-analyses were performed. Ten studies, comprising a total of 331 patients, 169 patients undergoing BSSO and 162 patients undergoing IVRO were identified. No statistically significant differences were observed regarding the angular measurements: Sella/Nasion/B point (SNB) angle post-operatively (standardized mean difference [SMD]= 0.39, 95% Confidence Interval [CI]: [-0.15] – [0.94], $p=0.16$, $I^2=57.09\%$) and 1 year after surgery (SMD= 0.72, 95% CI: [-0.08] – [1.53], $p=0.08$, $I^2=80.83\%$), gonial angle post-operatively (SMD=0.45, 95% CI: [-0.26] – [1.15], $p=0.21$, $I^2=72.54\%$) and 1 year after surgery (SMD= 0.15, 95% CI: [-0.79] – [1.08], $p=0.75$, $I^2=91.56\%$), and MP angle 1 year after surgery (SMD=-0.46, 95% CI: [-1.64] – [0.72], $p=0.45$, $I^2=90.81\%$). In addition, no statistically significant differences were observed regarding the linear measurements, the relapse of the mandible as measured by the relapse of B point 1 year after surgery in the horizontal axis (SMD= 0.73, 95% CI: [-0.25] – [1.72], $p=0.15$, $I^2=86.43\%$) and vertically (SMD= -0.76, 95% CI: [-1.97] – [0.45], $p=0.22$, $I^2=90.09\%$). BSSO and IVRO have similar results in terms of SNB and gonial angle relapse post-operatively and 1 year after surgery, MP angle 1 year after surgery and horizontal and vertical relapse, measured in reference to B point 1 year after surgery.

Keywords: Orthognathic Surgery; BSSO; Bilateral sagittal split osteotomy; IVRO; intraoral vertical ramus osteotomy

BONE REGENERATION FOR DENTAL IMPLANT PLACEMENT: A 5-YEAR RETROSPECTIVE STUDY OF 358 CASES

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Introduction: Bone regeneration techniques are essential prior to dental implant placement in cases of mandibular or maxillary bone deficit. Depending on the area and the extent of bone loss, as well as the type of prosthetic rehabilitation to be applied, different bone regeneration techniques can be used.

Aim: The scope of this study is to analyze a series of patients that underwent mandibular or maxillary bone regeneration, in effort to highlight the most widely used techniques and their outcome.

Materials and Methods: 358 cases that underwent maxillary or mandibular bone regeneration in an oral and maxillofacial private clinic within the last 5 years are thoroughly analyzed retrospectively in terms of various parameters from their demographic and medical records, the type of bone regeneration technique that was applied and the final bone augmentation and implant osseointegration outcome.

Results: The most widely used technique for bone regeneration was GBR ($n=184$, 51.3%), followed by sinus floor elevation ($n=162$, 45.3%) and autologous bone block grafts ($n=12$, 3.4%). In 1 case of GBR with a non-resorbable membrane, membrane exposure was noted. In 5 cases of sinus lift, inflammation occurred. In one case with bone block grafts from the iliac crest, inflammation was presented a few weeks after surgery and one of the bone blocks was partially resorbed.

Conclusions: GBR with a resorbable membrane barrier and sinus lift appeared to have the most predictable outcomes in terms of mandibular or maxillary bone augmentation.

HAS THE COVID-19 PANDEMIC INFLUENCED THE MANAGEMENT OF HEAD AND NECK CANCER PATIENTS? A SINGLE-CENTRE STUDY

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Objectives: The aim of the present study was to as-

sess whether the current COVID-19 pandemic affect the management of patients with head and neck cancer in a major tertiary hospital in Greece.

Materials and Methods: A retrospective comparative study was performed, assessing the hospitalization of patients with head and neck cancer in the university-affiliated Department of Oral and Maxillofacial Surgery. A 12-month analysis was performed, from March 2020 to February 2021, as the first COVID period. For comparative reasons, patients from March 2019 to February 2020 were recorded (pre-COVID period). All head and neck cancer patients operated during both periods were included in the study.

Results: In total, 168 patients were included. Of those, 88 were operated in the pre-COVID period and 80 in the COVID period ($p=0.53$). The mean age was similar in the two groups (67.3 years), with a slight male predominance in both groups. 40 patients with advance tumours (T3 and T4) were included in both groups respectively. Similar were the frequency of patients with lymph node disease.

Conclusions: Despite the surge of COVID-19 patients in our hospital and the difficulties that arised from the lack of human and technical resources, our Department managed to address to the head and neck cancer patients who presented during the COVID period. Qualitative data shows a similar rate of patients with head and neck cancer before and after the pandemic who were successfully operated in our Department.

Keywords: oral cancer, surgical management, COVID-19

PIEZOELECTRIC SURGERY VERSUS CONVENTIONAL ROTATORY BURS FOR SINUS LIFT SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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Abstract: Objective: The aim of this study is to compare

the outcomes after implementation of piezoelectric bone surgery versus conventional rotatory devices in sinus lift surgery.

Methods: A systematic review of MEDLINE (via PubMed), Scopus and Cochrane Library database was performed (last search date: 04 March 2022) according to the PRISMA guidelines. Only randomized controlled trials that directly compare the two techniques were included. Random-effects model meta-analysis were performed.

Results: Six studies, comprising a total of 140 patients/259 sinuses, 130 undergoing sinus lift with piezoelectric osteotomy device and 129 with conventional rotatory burs were identified and five of them were included in our meta-analysis. The two techniques were compared for intraoperative membrane perforation and operative time. No statistically significant difference was observed regarding membrane perforation (Standardized Mean Difference [SMD]: 0.87, 95% Confidence Interval [CI]: [0.33] – [2.28], $p=0.78$, $I^2=0.00\%$) and operative time (SMD: 0.76, 95% CI: [-0.09] – [1.60], $p=0.08$, $I^2=77.70\%$).

Conclusions: Data seem to agree that both piezoelectric osteotomy and osteotomy with conventional rotatory burs have similar results in membrane perforation and operative time when used for sinus lift surgery.

IMPLANT PLACEMENT WITH SIMULTANEOUS SINUS FLOOR ELEVATION IN THE PRESENCE OF A LARGE SINUS MUCOCLE: A CASE REPORT

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Abstract: Following extractions, bone resorption is expected on edentulous sites. Depending on the size of the bony defect, various bone reconstruction techniques have been proven successful. Sinus lift is a common procedure used to overcome bony defects, in cases of posterior maxillary atrophy. Bone grafts, bone substitutes or both are used, with either a staged approach or simultaneous implant placement. Autologous bone grafts, allografts, xenografts, and alloplastic bone

substitutes can be utilized as bone filler materials. Moreover, non-resorbable membranes such as dPTFE and titanium mesh and bioresorbable such as polymeric and collagen membranes can be used as barrier membranes depending on the defect size and type.

Non odontogenic diseases such as acute/chronic rhinosinusitis, mucocoeles, pseudocysts, retention cysts, and odontogenic lesions constitute common maxillary sinus pathology. Such pathologies increase the risk of surgical complications and require special management before bone augmentation. Their presence obstructs sinus floor elevation, due to their weight and the possibility that their content may contaminate the grafts.

In the current case report, a 62-year-old female patient with a mucocoele in the right sinus was referred for treatment with implants. Surgical management of the mucocoele, sinus floor elevation and simultaneous implant placement was performed. During the elevation of the Schneiderian membrane, the content of the mucocoele was drained via a needle and a collagen membrane was applied on the perforation site. Sinus augmentation was successfully performed despite the sinus membrane perforation. A mixture of autologous bone, harvested with bone scrapers, and allograft in a 60:40 percentage was utilized. Two implants were placed simultaneously. An absorbable collagen membrane covered the bony window. No complications were encountered during a 2 years follow-up period of the implants function.

THYROGLOSSAL DUCT CYSTS, A CASE SERIES IN ORAL MAXILLOFACIAL SURGERY DEPARTMENT OF G. PAPANIKOLAOU HOSPITAL OF THESSALONIKI

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Introduction: A thyroglossal duct cyst (TGDC) is the most frequent embryonic-origin cervical mass situated in the anterior of the neck. This anomaly occurs in approximately in 7% of people, usually in children. Mainly it presents as a mobile, non-tender, usually inferior to the hyoid bone (~75% of patients) painless swelling but it can be painful when accompanied by local inflammation. The recommended management for TGDC is the Sistrunk procedure, ensuring removal of the full length of the duct remnants by including the midportion of the hyoid bone.

Case series presentation: The aim of this paper is to present a case series of five patients who were operated in the OMFS department of Papanikolaou Hospital of Thessaloniki within 2.5 years (9/2019-2/2022). The patients were four males (80%) (mean age 50.5 years, outliers 36 and 71 years) and one (20%) 63 years old female. All of them presented with a mobile painless neck swelling and they had normal thyroid function. All patients underwent a surgical excision of thyroglossal cyst including the midportion of hyoid bone (Sistrunk procedure). None of them presented a recurrence.

Conclusion: A thyroglossal duct cyst (TGDC) although it is rare in adults as it is typically diagnosed and treated surgically in childhood, it can be complicated with inflammation. In any case, surgical resection and histological confirmation are required as cases of malignant lesion have been reported.

Keywords: thyroglossal duct cyst (TGDC), adult patients, surgical excision

THE EFFECT OF ORTHODONTIC TREATMENT ON THE PERIODONTAL TISSUES

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Introduction: Reduced periodontal support is a challenge that clinicians often face during rehabilitation of compromised dentition. The close and intricate relationship between the periodontal tissues and the processes of tooth movement suggest that adjunct orthodontic therapy may play an important role in overcoming these problems. On the other hand, excessive movement of teeth beyond the anatomic boundaries of the alveolar process is commonly believed to contribute to further destruction of the periodontal tissues

Purpose: To highlight the importance the periodontium health and root of the tooth during the orthodontic treatment

Method: A literature review for the last five years was performed, with keywords such as: orthodontic appliances, healthy periodontium, recessions, systemic reviews.

Results: Root resorption can be observed during the

orthodontic treatment which can follow up to tooth mobility as well as losing the tooth due to the treatment

Conclusions: The correction of some orthodontic problems, such as excessively tipped molars, traumatic deep-bites and flared and spaced incisors, maybe particularly beneficial in periodontally compromised patients who are motivated to undergo treatment and demonstrate stable periodontal conditions. However, several factors may contribute to a harmful periodontal response including the use of heavy forces, inappropriate force systems and poor oral hygiene. Excessive and unrealistic tooth movements are also likely to result in reduced alveolar bone thickness, especially in patients with thin cortical plates. On the other hand, the response of the soft tissues is less predictable and likely to be influenced by multiple factors.

LARGE PERIOCLAR DEFECTS RECONSTRUCTION WITH AXIAL AND RANDOM PATTERN FLAPS. INDICATIONS, TECHNIQUE DESCRIPTION AND FOLLOW-UP ON OCCASION OF 4 CASES

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Abstract: Introduction: Large periocular defects have always been a reconstructive challenge in terms of viability, cosmesis and functionality. Their vicinity with important anatomical structures makes reconstruction difficult to plan and the surgeon should take into account several alternatives.

Aim: Our aim is the presentation of techniques performed on our department patients. Four intendedly different cases treated with respective flaps are documented preoperatively, postoperatively and in the follow-up period.

Material – Methods: 4 Patients (2 male and 2 female) with cutaneous malignancies concerning: the inner canthal ligament area (1), the nasal flank and lower eyelid (1) and the lower tarsal plate (2). 1 inferiorly based advancement nasolabial flap, 2 Mustardé flaps and 1 Tenzel flap were performed. The mean age of the patients was 85,75 y.o. (range from 77 to 96).

Results: All four patients had disease-free margins of excision and no recurrence at all. We avoided composite

approaches with concern to their age and general condition. No complications were mentioned (including necrosis of the flap, wound dehiscence or infection). The esthetic result is judged fair (1 patient), good (1 patient), very good (2 patients). In the follow-up period, one patient presented mild epiphora and another mild corneal exposure. One patient being planned to undergo a differed correction postponed his treatment.

Conclusion: Meticulously designed traditional flaps such as V-Y advancement flap, Mustardé flap and Tenzel flap can offer an acceptable outcome balanced between functionality and cosmetic result on the one hand and lessening complications on the other.

SUCCESSFUL PERIOPERATIVE MANAGEMENT OF HIGH-RISK ELDERLY PATIENTS WITH ADVANCED HEAD & NECK CANCER IN THE COVID ERA. OUR EXPERIENCE

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Introduction: Elderly patients with advanced head and neck cancer undergoing major surgery are at high risk due to their co-morbidities and prolonged procedures. Thus, they often require admission in the ICU.

Purpose: We herein describe the perioperative management of elderly patients, with significant comorbidities, surgically treated for stage II-IV head and neck cancer with a specialized anesthesia protocol in the COVID-19 era.

Material - Method: In total, 11 consecutive patients (4 female, 7 male, mean age 74 years, ASA III-IV), with advanced cancer involving oral mucosa, salivary glands and metastatic skin cancer were treated in UHL between 3/2021 and 3/2022. Operation duration varied from 5 to 13 hours, as the extent of disease necessitated extirpation and reconstruction with free or regional flaps in most cases. Hence, an individualized and patient-centered approach was implemented, with the preanesthetic evaluation, the utilization of both an enhanced recovery (ERAS), specialized anesthesia protocol and the prompt postoperative care delivered by the anesthesia team.

Result: No intraoperative adverse events were reported. Admissions in ICU were obviated. One patient underwent neck exploration for bleeding control being treated with therapeutic doses of LMWH (grade IIIb Clavien-Dindo). One more patient required blood transfusion (grade II Clavien-Dindo). Donor site wound breakdown was recorded in 4 patients (grade IIIa Clavien-Dindo). Hospital length ranged from 5 to 14 days. 30-day mortality was 0%.

Conclusion: Good rapport between involved teams along with the implementation of an individualized perioperative approach of this patient cohort resulted in an uneventful outcome amid the COVID-19 pandemic.

BONE REGENERATION IN HEALTHY AND OSTEOPOROTIC CONDITIONS. PRECLINICAL EVIDENCE

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Introduction: Osteoporosis is one of the most common skeletal disorders affecting a significant percentage of people worldwide. Research data suggested that systemic diseases such as osteoporosis could act as risk factors for bone regeneration, jeopardizing the healing process and thus the predictability of bone regenerative techniques on compromised patients. The use of titanium dental implants is considered a successful and largely predictable treatment option for partial/full edentulism. However, a prerequisite for the successful implant placement in the prosthodontically ideal driven position is a minimum amount of bone at the recipient site. It is well accepted that preclinical studies in experimental models simulating healthy and systemic conditions, are one of the most important stages in the research of new biomaterials and therapeutic modalities.

Aim and Methods: The aim of this study is to review the potential effect of osteoporosis on guided bone regeneration in healthy and osteoporotic-like conditions in preclinical models.

Material and Methods: Literature search was conducted in MEDLINE and PUBMED up to March 2022.

Results: Research data showed significant new bone apposition in the defect sites, although a trend for less bone formation of lower quality was observed in osteoporotic compared to healthy conditions.

Conclusion: Evidence suggested that low level of estrogen might negatively affect the biological process of bone grafts/substitutes integration. Preclinical studies provide the possibility of better understanding the underlying mechanism of bone regeneration in compromised conditions. It is important to emphasize that optimization of these models, simulating healthy and systemic conditions, is important for future research.

HAS THE COVID-19 PANDEMIC INFLUENCED THE NUMBER OF PATIENTS WITH CERVICOFACIAL INFECTIONS? A SINGLE CENTRE STUDY

DOI: [10.54936/haoms231o6](https://doi.org/10.54936/haoms231o6)

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Objectives: The aim of the present study was to assess whether the current COVID-19 pandemic affect the prevalence of patients with cervicofacial infections in a major tertiary hospital in Greece.

Materials and Methods: A retrospective comparative study was performed, assessing the hospitalization of patients with cervicofacial infections in a university-affiliated Department of Oral and Maxillofacial Surgery. Patients were recorded in two periods, the COVID period, from March 2020 to February 2021, and the pre-COVID period, from March 2019 to February 2020. All patients admitted with any form of cervicofacial infection during these periods were included in the study.

Results: In total, 341 patients were recorded. Of those, 151 were admitted in the pre-COVID period and 190 in the COVID period ($P=0.03$). The mean age was 45.3 years in total. A slight male predominance was observed (54.7% males). Mean length of stay was 3.42 days in the COVID period, whereas it was 2.5 in the pre-COVID period. 23 patients had severe deep neck infections the COVID period, requiring admittance to the intensive care unit, compared to the 3 patients in the previous period ($P<0.001$).

Conclusions: The high surge of patients with cervicofacial infections with increased severity during the COVID period is merely attributed to the inability of these patients to attend primary care facilities and prevent the infections in an initial stage in order to minimize hospitalizations.

Keywords: cervicofacial infections, deep neck infections, odontogenic abscesses, COVID-19

CLINICAL APPLICATIONS OF SAFESCRAPER® IN MAXILLARY SINUS FLOOR ELEVATION AND RIDGE AUGMENTATION

DOI: [10.54936/haoms231o20](https://doi.org/10.54936/haoms231o20)

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Introduction: Although there is a wide variety of bone grafting materials for the augmentation of the deficient alveolar ridge, autogenous bone is still considered to be the gold standard. There are various methods for harvesting autologous bone grafts. Among these, Safescraper® is conveniently used as a harvesting device of autogenous cortical bone in oral Implantology and reconstructive surgery, ensuring high volumes of grafting material with a minimally invasive and predictable procedure.

Purpose: The purpose of this presentation is to showcase the clinical applications of Safescraper® in various augmentation procedures and to review the existing literature for the evidence supporting its application in clinical practice.

Materials and Methods: In the presented cases, Safescraper® provided surface-derived autogenous bone graft deriving from the maxillary tuberosity, the zygomatic buttress, the lateral sinus wall, the pyriform aperture of the nose, the external oblique ridge and the mandibular symphysis. The collected autogenous bone has been mixed either with xenograft, or autologous venous blood, or platelet-rich fibrin and used in procedures such as:

- Maxillary sinus floor elevation,
- Reconstruction of periimplant defects,
- Reconstruction of alveolar ridge defects with onlay autogenous blocks, or bone rings,
- Ridge augmentations using resorbable collagen membranes, titanium-reinforced non-resorbable membranes or titanium meshes,
- Ridge augmentations using the Khoury technique.

Results: Satisfactory amounts of autogenous bone have been harvested in all cases. The bone harvesting procedure was swift, reliable and devoid of any complications.

Conclusion: Safescraper® is an extremely useful, cost-effective and minimally invasive device for collecting bone to adequately cover the needs in autogenous grafts everyday clinical practice.

HAS THE COVID-19 PANDEMIC AFFECTED THE PREVALENCE OF MAXILLOFACIAL FRACTURES? A SINGLE CENTRE STUDY

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Objectives: The aim of the present study was to assess whether the current COVID-19 pandemic affect the prevalence of patients with maxillofacial fractures in a major tertiary hospital in Greece.

Materials and Methods: A retrospective comparative study was performed, assessing the hospitalization of patients with maxillofacial fractures in a university-affiliated Department of Oral and Maxillofacial Surgery. Patients were recorded from March 2020 and for 18 months (COVID period). For comparative reasons, a similar period was set, starting from September 2018 to February 2020 (pre-COVID period). All patients admitted with any form of maxillofacial fracture during these periods were included in the study.

Results: 301 patients were included in the study, 158 in the pre-COVID period and 143 in the COVID period. The mean age was 37.8 years in total. A male predominance was observed (81.7% males). Most fractures concerned the mandible in both periods (61.4% and 53.1% respectively). Panfacial fractures were recorded in 8.2% in patients pre-COVID and 6.9% in patients post-COVID. Concomitant injuries were observed in 20.6% of patients pre-COVID and 8.3% post-COVID, and ICU hospitalization was recorded in 8.9% and 4.2% respectively. Delay in definitive treatment was recorded in 1.2% and 14% of patients respectively.

Conclusions: Despite the relative stability of the prevalence of patients with maxillofacial fractures, the severity of those seems lower in the pandemic period. Higher delays until definitive treatment were recorded, as expected by the reduction of available human and technical resources during the pandemic.

Keywords: maxillofacial fractures, COVID-19

CERVICAL VAGUS NERVE SCHWANNOMA IN AN ADULT PATIENT: A CASE REPORT

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Introduction: Schwannomas are slow growing, benign, encapsulated nerve sheath tumors that derive from Schwann cells and are usually asymptomatic. Most common age of presentation is between 20 to 50 years of age and no difference in incidence among genders is noted. Schwannomas that frequently present in the head and neck region are extracranial schwannomas with an incidence of 25%-45%. Although benign, there is an 8-13.9% possibility of malignant change.

Case presentation: A 41-year-old male patient presented with a history of a neck mass in the right lateral neck region, which was present for the last 8 years. However the patient began to experience some non-specific symptoms during the last year. The main complaints were mild hoarseness of voice, episodes of bradycardia and syncope. The patient underwent Magnetic Resonance Imaging (MRI) of the neck. The MRI demonstrated a well-circumscribed, highly-vascularized mass with dimensions 3,5 x 3,5 x 1,6 cm in the right lateral neck region. The patient underwent complete surgical removal of the lesion with dissection and preservation of the vital anatomic structures. 12 months later he remains asymptomatic with no signs of recurrence.

Conclusions: Vagus nerve schwannomas are rare occurring neck masses with unusual and atypical symptoms. In the case of vagus nerve schwannomas, patients occasionally present with hoarseness and a specific pathognomonic symptom of paroxysmal cough upon cervical mass palpation. Imaging is a very helpful instrument for the diagnosis and surgical planning. Complete tumor removal is the treatment of choice, as it is associated with lower recurrence rates.

A RARE CASE OF CERVICAL CYSTIC LYMPHANGIOMA IN AN ADULT PATIENT

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Introduction: Lymphangioma of the neck is a rare benign tumour arising from the cervical lymphatic vessels. Three morphological types are described: capillary, cavernous and cystic. Almost 90% of these lesions are diagnosed before the age of two years old and a small number of cases of lymphangiomas are reported in adult patients. We present the diagnostic and treatment approach of a cervical cystic lymphangioma (CL) in an adult male.

Case presentation: An 85-year-old male was referred to the outpatient clinic of the Department of Oral and Maxillofacial Surgery with a history of a left-sided neck mass. The mass has been present for the last 15 years, but its size had increased during the last three months. The main complaints were a rapid increase in size and mild hoarseness of voice. FNAC was performed and 48cc of bloody fluid were aspirated and CL was suggested as a possible diagnosis. The patient underwent complete surgical excision of the lesion with dissection and preservation of the vital anatomic structures. He remains asymptomatic 1 year later with no signs of recurrence.

Conclusions: Although rare, CL should be included in the differential diagnosis of cervical masses. Diagnosis is based on medical history, US of the neck, MRI, CECT and FNAC. Total surgical excision of the mass is the treatment of choice. In our case, the patient was mainly asymptomatic except for mild hoarseness of voice. FNAC suggested the lymphovascular origin of the lesion and the MRI depicted a well-defined lobulated mass that mildly deviated the trachea. Total excision of the mass was accomplished. He remains asymptomatic 1 year later.

PTERYGOID PLATE IMPLANTS FOR THE REHABILITATION OF THE ATROPHIC POSTERIOR MAXILLA: SURGICAL TECHNIQUE AND REPORT OF CASES

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Introduction: The rehabilitation of the atrophic posterior maxilla with dental implants is a challenging procedure due to various limitations. Low bone quality and quantity, the anatomy of the maxillary sinus and inaccessibility to the area, are the most frequent obstacles that surgeons have to overcome. Several surgical techniques have been used as a solution to this problem, such as sinus lift augmentation procedures with bone graft, guided bone regeneration, tilted implants, short implants, zygomatic implants and pterygoid plate implants.

This case report presents the placement of implants in the pterygomaxillary region, aiming to restore the partially edentulous posterior maxilla in two patients, without any additional surgical procedures. The aim was to place a fixed dental prosthesis using a minimum invasive surgical protocol. The usual surgical technique had to be modified because of the anatomical limits encountered in that region, as the quality of bone and the extent of the maxillary sinus. A 30 years follow up is presented.

Conclusion: In view of the clinical case follow up and the literature review that only minor surgical complications have been reported, it is concluded that pterygoid implants are a valid and safe solution for the rehabilitation of the edentulous posterior maxilla avoiding more invasive surgical procedures.

HYBRID VERRUCUS CARCINOMA OF THE ORAL CAVITY: A CASE REPORT AND REVIEW OF THE LITERATURE

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Introduction: Verrucous carcinoma (VC) of the oral mucosa is a rare type of non-metastatic, low-grade and well differentiated squamous cell carcinoma. The neoplasm is typically presented with a slow and superficial growth in elderly males. Various factors are known to implicate in its pathogenesis and affect the progression and prognosis of the neoplasm. When invasive atypical areas are present, VC is then described as hybrid verrucous carcinoma (HVC).

Case Report: A 55-year-old woman was referred with an elevated leukoplakic verrucous lesion on the dorsal surface of the tongue, measuring 2 cm at its maximum diameter. The patient had been a smoker for ten years with no pertinent past medical history. An incisional biopsy had already been performed a month before referral with the histopathology report of an atypical verrucous papillary lesion. An excisional biopsy was performed at the referral and the lesion was resected with a spindle-shaped surgical incision circumcising the neoplasm within safety margins. The final histopathology report made the diagnosis of VC with multiple foci of microinvasive squamous cell carcinoma (verrucous carcinoma – hybrid type).

Conclusion: Differential diagnosis of VC still remains a challenge and various clinical, histopathological and immunohistochemical parameters should be considered. The treatment of choice for VC is surgical excision within safety margins. A clinical follow-up should then be scheduled for these patients and they must remain alert for any changes of the oral mucosa for the future.

A COMPARISON OF GBR MEMBRANES

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Introduction: Guided bone regeneration has become common practice among surgeons because it gives them the opportunity to place implants in bone defects or absorbed alveolar ridges. This fact raises the question which membrane should one use to achieve the best results.

Purpose and Methods: The aim of this study is to present the most recent data around GBR membranes. The existing types of membranes will be compared for their ability to facilitate bone regeneration, their biocompatibility, and their clinical complications. Research for this study was done by evaluating papers of the last decade from the following online databases: PubMed, Medline, and Google Scholar. Finally, selected clinical cases will be presented.

Results: Membranes are divided in two main categories resorbable (collagen, synthetic) and non-resorbable (ePTFE, Ti reinforced). It is quite challenging to compare clinical trials because they use different parameters for comparison such as selection criteria of the patients, the type of defect to be treated, the way of executing the treatment, the duration, the materials used and the evaluation criteria. As far as bone regeneration is concerned there seem to be no significant differences in bone level and density of newly formed bone between different types of membranes when used in combination with bone grafts. However, non-resorbable membranes are more likely to cause tissue dehiscence, become exposed to the oral environment and subsequently become infected. Also, there are new types of membranes being studied which aim to play an active role in bone regeneration with embedded active ingredients, but more research needs to be done.

Conclusions: According to the most recent protocols the combination of bone grafts and collagen membranes is selected in most cases because it has less clinical complications.

OSSEODENSIFICATION. A PROMISING NEW TECHNIQUE

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Introduction: The technique of Osseodensification has recently appeared in clinical practice by Salah Huwais for the placement of dental implants. This technique relies on the use of special burs (Versah), which in contrast to the conventional drilling techniques these burs do not excavate bone.

Purpose: To highlight the importance of Osseodensification in clinical practice.

Method: A literature review for the last five years was performed, with keywords such as: Implant stability, osseodensification, osteotomy.

Results: During osteotomy, unlike conventional implant drills, the bone is advanced into the implant shaft instead of being removed. Versah burs allow for more accurate osteotomy preparation and reduce any potential drilling vibrations. With these special burs we have the ability to push the bone towards the base of the implant lumen. Finally, a closed sinus lift can be achieved by lifting the sinus membrane up to 3 mm without the use of a foreign graft.

Conclusions: Osseodensification has helped the clinician to achieve the maximum possible primary stability during the placement of the implant. The fact is, however, that there is a lack of sufficient documentation. It is therefore necessary to carry out more clinical studies, so as to lead to safer conclusions about the long-term results of the above technique.

PERFORATION OF SINUS MEMBRANE DURING SINUS FLOOR ELEVATION: REPAIR WITH COLLAGEN MEMBRANE AND METHOD RELIABILITY

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Introduction: Sinus floor elevation (sinus lift) constitutes one of the most predictable methods of bone augmentation in the maxillary posterior region. However sinus membrane perforation during this surgical procedure may be an aggravating factor for the final bone augmentation outcome, thus a number of techniques have been introduced for immediate sinus membrane repair.

Aim: The scope of this scientific work is to present the application of collagen membrane surgical technique, which is a widely used technique for sinus membrane

repair after sinus membrane perforation when performing sinus lift. Moreover, the outcome of this surgical technique in terms of bone augmentation and implant osseointegration are also presented, as well as an extensive literature review on this subject.

Materials and Methods: 106 cases with sinus floor elevation were performed within a period of 3 years, accounting for a series of 12 cases with sinus membrane perforation. In all 12 cases sinus membrane repair took place with the application of a collagen membrane.

Results: In 3 out of 106 cases of sinus floor elevation inflammation of the involved maxillary sinus was noted but none of these 3 cases was implicated with sinus membrane perforation.

Conclusions: Taking into account the data of the present work, as well as an extensive literature review on this subject, immediate repair with collagen membrane after sinus membrane perforation when performing sinus lift, is a very effective technique for maxillary bone augmentation.

“LIP SHAVE” TECHNIQUE: LITERATURE REVIEW AND CASE PRESENTATION

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Introduction: Actinic cheilitis is a pre-malignant condition, mostly located on the lower lip, and can progress to squamous cell carcinoma, with higher tendency for metastasis than cutaneous squamous cell carcinoma. Several methods of treatment have been proposed, like electrosurgery and excision of the actinic damage via laser treatment. However, all methods have limitations. On the other hand, the surgical technique known as “lip shave”, achieves complete removal of the lesion, and promotes the reconstruction of the vermilion border.

Case presentation: A 65-years old patient was referred to our Department for treatment of a lesion extended to the whole lower lip, diagnosed as actinic cheilitis after partial biopsy and histopathological examination. Under

local anesthesia the outlined lesion was entirely excised, while the lip is was firmly immobilised with the thumb. After the mucosa was first elevated by sharp dissection from one corner, it was then conveniently removed by curved, pointed scissors down to the muscular layer. After securing haemostasis, three “key sutures” were first placed, in order to achieve an even symmetrical closure. The final closure of the wound was achieved with continuous locking suture.

Conclusion: The “lip shave” is a non-deforming plastic and reconstructive procedure of great value for prophylaxis and treatment of lip cancer, and for cosmetic correction of certain congenital, neoplastic, and traumatic lip deformities.

FOUNDATION OF THE OSSEOINTEGRATED PROSTHESIS ON THE COMPROMISED REMAINING ALVEOLAR BONE

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Abstract: Tooth loss is inevitably followed by relevant bone loss. Careful volumetric evaluation of the residual bone is the initial step in treatment planning the implant supported reconstruction. Utilizing the existing limited volume of the remaining bone for supporting the osseointegrated prosthesis, may reduce the need for additional preparatory bone augmentation surgical procedures. As long as the preoperative soft-tissue architecture of a periodontally or endodontically terminal tooth in the esthetic zone is considered acceptable, the flapless immediate extraction implant placement can result to the preservation of the original emergence architecture. The primary stability is secured by inserting the implant in the remaining sound bone by avoiding the defect area. Additional osseo-conductive inorganic substance is applied in the defect area to provide adequate mechanical and biologic soft-tissue support.

Rehabilitation of the atrophic posterior maxilla can be accomplished by implant insertion simultaneously with closed or opened sinus floor elevation. Moreover, tuberosity/pterygoid Implants have also been applied as a successful alternative approach. On the other hand, reconstruction of the posterior atrophic mandible can be achieved by avoiding the mandibular nerve by deviating the implant insertion lingually or buccally on the cortical bone of the internal or external oblique line.

CONFLICT OF COVID-19 PANDEMIC RESTRICTIONS IN THE FIRST DIAGNOSES OF SKIN CANCER IN 2020: A SINGLE-CENTRE STUDY

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Objectives: The data results of the skin cancer treatment institute aim to approach the affect of COVID-19 pandemic in the first detection of new skin cancer cases in 2020.

Materials and Methods: The study is retrospective and compares the data between 2020 and the expected incidence of the same year (mean of the years 2016-2019) of the new diagnosed cases of skin cancer which concerns squamous cell carcinomas (SCC), basal cell carcinomas (BCC), and melanomas.

Results: The results of the institutional data disclose the expected concern related to COVID-19 pandemic, with a reduction of 30.1% new skin cancer cases. The decrease of first-diagnosed SCC, BCC, and melanomas compared to expected incidence is respectively 44.8%, 22.3% and 36.3%. The mean age of the patients' skin cancer first diagnosis is impressively lower and similarly the diagnosis at stages 0 and IA shows a same course. On the contrary, skin cancer at stages IIC, III and IV that were first detected, confirmed to be much higher.

Conclusions: The study data revealed that the COVID-19 pandemic effluent led to skin cancer diagnosis delay. It is highly recommended to the authorities and the national health system support the early skin cancer diagnosis of the population.

Keywords: Skin cancer diagnosis, melanoma diagnosis, covid-19 pandemic

MARSUPIALIZATION OF LARGE MANDIBULAR RESIDUAL CYSTS. TWO CASE REPORTS

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Introduction: Large residual cysts are relatively rare inflammatory cysts of the jaws. They derive from radicular cysts that had not been completely removed after dental extraction. In some cases, these lesions can grow large without any symptoms and they are discovered as incidental radiographic findings. Marsupialization is an alternative treatment for large cysts, avoiding significant complications such as nerve injury, jaw fracture, sinus or nasal perforation which can occur from curettage during enucleation.

Case presentation: We present two different cases of male patients with mandibular residual cysts, who were referred to our department. Both patients presented with swelling and pyorrhea. The radiological examination revealed large well-defined lesions that had absorbed extensive jaw sites. The localization of both cysts was significantly close to the inferior alveolar nerve. Marsupialization and acrylic resin obturator placement was performed in both cases. The follow up period of 18 months from surgery is presented.

Conclusion: In conclusion, marsupialization is a conservative, efficient surgical technique that promotes bone healing and the shrinkage of the existing lesion.

SUBSEQUENT THERAPEUTIC TREATMENT OF MEMBRANE EXPOSURE AFTER GBR IN THE ANTERIOR MAXILLAE: A CASE REPORT

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Abstract: Guided bone regeneration (GBR) aims to augment the areas with osseous defects in compromised dentition. Bone grafting materials, barrier membranes

and growth factor therapies have been utilized to minimize the dimensional changes in the bone morphology and architecture occurring postextraction. GBR procedures are performed using materials such as autografts, allografts, xenografts, or synthetic bone grafts or combination. Barrier membranes are used to maintain the space and prevent the infiltration of fibrous tissue. Such membranes are: non-resorbable PTFE membranes, collagen-based absorbable membranes, synthetic absorbable membranes, titanium mesh membranes and PRF. In this case report, a 67 years-old lady was referred for implant rehabilitation in the right anterior maxilla. The reason of tooth loss was vertical root fracture. GBR was performed at the area of #12 and #13, due to severe bone defect. A combination of 50:50 allograft and xenograft bone grafting material, non-resorbable titanium membrane and PRF membranes was used. One-month post-op exposure of the membrane was noticed. At this point, it is important to be mentioned that on the day of the surgery primary closure was not achieved at the area #13, due to lack of soft tissue thickness. Replacement of the first membrane by a collagen based absorbable one and tension free suturing was performed. One month after the second intervention, soft and hard tissue healing was completed unhindered.

ESTIMATION OF RECURRENCE RATES WITH OFF-LABEL USE OF 5% IMIQUIMOD AS AN ADJUVANT THERAPY AFTER SURGERY OR AS A MONOTHERAPY IN PATIENTS WITH LENTIGO MALIGNA

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Objectives: The aim of this paper is to present the experience of off-label application and possible decrease of recurrence rates in patients with lentigo maligna, when treated only with 5% imiquimod or imiquimod 5% after surgical excision in clinical narrow margins (<5mm) or wider margins (≥5mm).

Materials and Methods: A multicenter analysis was performed in 7 European centers and n=149 patients were included in three groups a) those with adjuvant application of imiquimod after surgical excision in his-

topathologically clear margins (narrow <5mm) (group 1a) or (wider ≥5mm) (group 1b), b) those with adjuvant application but with histopathologically involved margins (group 2) c) those who received monotherapy with imiquimod (group 3). In all patients was applied 5% imiquimod cream, 7 days/week, for 6-13 weeks.

Results: The recurrence rate in group 1b and group 1a were (6.2% to 5.5% respectively). Thus, the application of imiquimod before or after conventional surgery to narrow margins might result in acceptable recurrence rates, possibly comparable to those achieved with surgical techniques involving complete margin assessment, such as Mohs micrographic surgery, but this hypothesis should be assessed by a randomized trial. The recurrence rate in group 2 was 9.1% at a mean follow-up of 34 months while in group 3 imiquimod monotherapy resulted in complete clinical response in 71.4% of treated patients.

Conclusions: In conclusion by this study is supported surgery as the primary treatment in operable patients with lentigo maligna. In any case the experience by application of Imiquimod in combination with conservative surgery is encouraging.

Keywords: lentigo maligna, imiquimod, adjuvant therapy

PERI-IMPLANTITIS IN DENTAL IMPLANTS PLACED IN AUGMENTED BONE: A CASE REPORT

DOI: [10.54936/haoms231p3](https://doi.org/10.54936/haoms231p3)

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Abstract: Introduction: Periimplantitis is a disease most commonly affecting dental implants placed in patients with a history of periodontal disease. It is still questionable if native bone is more resistant to periimplantitis than regenerated bone.

Case presentation: A case of dental implant placed in regenerated bone in a patient with treated periodontal disease is presented. The patient is a male healthy adult, who lost the tooth #11 due to advanced periodontal

disease. 4 weeks after tooth extraction, the alveolar ridge was augmented and the dental implant was placed 5 months after the guided bone regeneration. The dental implant was restored 3 months after placement. The patient was compliant with the periodontal recall appointments for 2 years. After a personal crisis, the patient neglected his oral hygiene and failed to follow his periodontal recall visits for 7 years. When he finally presented for a dental examination, the dental implant #11 showed significant bone loss and periodontal tissue inflammation. The site was treated conservatively and surgically treated and augmented-with a combination of xenograft, allograft and a collagen membrane-in order to achieve re-osseintegration.

Conclusions: Patients with periodontal disease are at high risk for peri-implantitis. Regular recall visits are essential for maintenance of dental tooth and implant health, since treatment of peri-implantitis is a very demanding procedure.

ROOT COVERAGE TECHNIQUES FOR GUM RECESSION

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Introduction: Gingival recession, also known as receding gums, is the exposure in the roots of the teeth caused by a loss of gum tissue and/or retraction of the gingival margin from the crown of the teeth. The aetiology of the condition is multifactorial but is commonly associated with underlying alveolar morphology, tooth brushing, mechanical trauma and periodontal disease

Purpose: To highlight the importance of covering gingival recessions and the presentation of various surgical techniques of covering receding gums

Method: A review of the literature of the last five years was performed, with keywords such as: gingival recession, surgical flaps, root coverage techniques.

Results: Main reasons of covering gingival recessions are thermal hyperesthesia and esthetics of the oral cavity. The root coverage can be achieved by using free gingival graft tissue from the hard palate of the patient or biomaterials such as bovine and synthetic material.

Conclusions: The choice of the right technique for covering the gum recession plays an important role in the

treatment plan. However, the surgeon should be experienced and make all the proper treatment planning choices for the esthetic result.

“THUNDER – LIKE” PLASTY FOR TWIN NASAL TIP DEFECTS. TECHNIQUE DESCRIPTION AND INDICATIONS

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Introduction: Reconstructive approaches to nasal tip defects are always challenging to perform, depending on the age of the patient, shape of the nose, local anatomy and adjacent structures. Many techniques have been described, each one with its advantages and limitations.

Aim: Our aim is a new technique description designed for the reconstruction of twin defects of the nasal tip. The decision-making, the step-by-step description, and its application to a male patient are explained in detail.

Material - Method: A 61 years old male patient was referred to our department with two benign lesions of the nasal tip. Due to their proximity, a simultaneous excision was planned in a way that allowed both adequate excision and minor defect dimensions. The remaining defect was reconstructed with a combination of 2 rotation flaps and 2 V-Y plasties.

Results: Very good skin match (color and texture). Suture lines are barely detectable because they are buried in the anatomical border between the nasal tip and the alar area. No consequences for the alar shape or the columella are mentioned (deviation, stricture, narrowing or flattening respectively).

Conclusion: This technique has been influenced by the “East – West plasty”. Its innovative elements are: 1. The upper triangle hereafter contains the second lesion. 2. The V-Y plasties we intendedly added on top of each rotation flap limit loss of length resulting in well aligned scars. The technique is advisable for benign lesions, in situ malignancies or for centers performing Mohs micrographic surgery.

GUIDED IMPLANT PLACEMENT ON EDENTULOUS MAXILLA TO AVOID DAMAGE TO ACCESSORY BRANCHES OF THE CANALIS SINUOSUS: A CASE REPORT

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Abstract: Introduction: The canalis sinuosus (CS) is an anatomical structure arising from the infraorbital nerve. It is a neuromuscular canal, carrying the anterior superior alveolar nerve and vessels. Rarely, accessory bilateral branches of CS are observed on cone beam computed tomography (CBCT) images, during implant planning, in the anterior maxilla region. It is an important anatomical structure often overlooked by surgeons and not visible by conventional radiographs.

Case report: A case of anatomical variation in the CS with accessory branches was detected after a CBCT was performed on an edentulous 72 years old male patient pre operatively for implant placement. On the examination of the axial slices of the CBCT, additional foramina lateral and anterior to the nasopalatine foramen were observed. By tracing into the bone from these foramina, it was observed that these accessory canals communicate with the CS. Implant planning was performed, respecting these canals and a surgical guide was fabricated, using the dual scan protocol from the patient's denture. A post-op CBCT was performed to determine the accuracy of our guide and the position of the implants. No post-op complications were observed.

Conclusion: Several cases of intractable pain following implant placement in the anterior maxilla have been reported. Damage to the CS and its accessory canals may be the cause. Knowledge of these anatomical variations is of great importance and the use of guided implant placement is a useful tool to avoid iatrogenic surgical trauma and post-op surgical distress to the patient.

EVALUATING THE MINIMAL CLINICALLY IMPORTANT DIFFERENCES IN QUALITY-OF-LIFE QUESTIONNAIRES EORTC QLQ-C30 AND QLQ-HN35, IN HEAD AND NECK CANCER PATIENTS ACCORDING TO THE EUROPEAN ORGANIZATION FOR RESEARCH AND TREATMENT OF CANCER.

DOI: [10.54936/haoms231p11](https://doi.org/10.54936/haoms231p11)

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Objective: Specific and certified quality of life (QoL) Instruments, regarding the EORTC QLQ-C30 and EORTC QLQ-HN35 are used to evaluate the scale of change that is clinically significant in a number of diagnosed and treated head and neck cancer patients. The purpose of the study was to calculate both the statistical and the clinical impact that the disease and the treatment had, in the life of those patients.

Materials and Methods: The patients answered the EORTC QLQ-C30 and EORTC QLQ-HN35 questionnaires at baseline and in a two-month follow-up period. The calculation of the Minimal clinically important differences (MCID) was feasible via anchor and distribution-based methods both for deterioration and improvement. The anchor used for determining the meaningful change was the Karnofsky Performance (KPS).

Results: In patients that deteriorated, the symptoms that reached statistical significant meaningful change were greater. Using the KPS anchor, results for meaningful change values in a range from 7.2 (physical functioning) to 16.7 units (Global Health Status) for deterioration were recorded, whereas for improvement, the values ranged from 1.6 (role functioning) to 6.6 units (Global Health Status). For both Instruments used, the distribution-based estimates were as good as 0.5 SD.

Conclusion: The EORTC QLQ-C30 and QLQ-HN35 questionnaires and especially the significant changes on them are important tools when used to evaluate the effect and the outcome of the treatment methods in QoL and also for follow-up reasons. MCIDs are also useful for sample size determination and clinical trial purposes.

Keywords: head and neck cancer, quality of life questionnaires

AUTOLOGOUS BONE GRAFTS – INDICATIONS AND RESTRICTIONS

DOI: [10.54936/haoms231p12](https://doi.org/10.54936/haoms231p12)

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Introduction: Autologous bone grafts and especially intraoral autografts have been used with increasing success for centuries and remain in common use today. They involve the transport of bone from an intraoral donor site to a different intraoral site, in the same patient.

Aim and method: The aim of this poster is to introduce the intraoral autogenous bone grafts and evaluate the indications and restrictions of these techniques.

Material and method: Autografts are commonly obtained from intraoral sites such as: symphysis mandible, ramus mandible, anterior sinus wall and lateral zygomatic buttress. Autograft bone harvested from mandibular ramus is used when the requiring augmentation is less than 4mm in thickness and span a maximum of four teeth. Although this graft presents a risk of damage to the inferior alveolar nerve, it is associated with secondary complications compared to other intraoral sites. Generally, indications for bone augmentation procedures are determined by means of the following parameters: a) Presence of severe alveolar ridge atrophy rated classes IV and V according to the Cawood and Howell classification b) Residual maxillary bone less than 5 mm from the alveolar crest to the sinus floor.

Results: Even when major augmentation procedures with autografts had to be carried out for severely resorbed jaws, success rates exceeding 95% have been achieved.

Conclusion: Although, autografts occasionally have significant drawbacks, such as increased postoperative morbidity, the need of secondary surgical visit and the lack of sufficient bone mass at the donor site, it is still regarded as the gold standard in alveolar reconstruction, due to its osteoconduction, osteoinduction and osteogenesis-inducing characteristics.

VERTICAL RIDGE AUGMENTATION IN THE POSTERIOR MANDIBLE – A CASE REPORT

DOI: [10.54936/haoms231p13](https://doi.org/10.54936/haoms231p13)

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Institution where the clinical case took place: Athenasmile Pelekanos.

Abstract: Tooth loss leads to bone resorption and, in some cases, to insufficient alveolar bone, for implant placement. To provide adequate bone volume and ensure an aesthetic result, Guided Bone Regeneration (GBR) often is prerequisite in order to increase alveolar ridge vertically and horizontally.

The purpose of this poster is to analyze a case with extended bone loss in the posterior mandible and to present the clinical procedure and outcome of a vertical ridge augmentation followed by the implant placement. An extended vertical bone augmentation was performed, using autogenous graft combined with allograft and xenograft, stabilized by a fibrin sealant made from pooled human plasma. To protect the graft, a non-resorbable high-density PTFE membrane with titanium frame was used, fixed in place with titanium pins. Seven months later, a second surgery took place for the membrane removal and the guided implant placement. Furthermore, due to limited attached keratinized tissues, a free gingival graft from the palatal was placed to the area.

After the period of osseointegration, and the effective increase of the attached gingiva, a digitally made monolithic zirconia implant-supported bridge was designed and successfully restored the edentulous area.

The rehabilitation of edentulism using implants requires a sufficient bone volume for the purpose of long-term prognosis. GBR is one of the most reliable and predictable methods to reconstruct alveolar ridge even in cases with extended bone loss. However, extended vertical bone augmentation constitutes a serious clinical challenge and has to be carefully executed following the contemporary protocols.

RARE PRESENCE OF FOREIGN BODIES IN MAXILLARY SINUSES DUE TO DENTAL PROCEDURES; A RETROSPECTIVE CASE SERIES ANALYSIS OF TREATMENT

DOI: [10.54936/haoms231p14](https://doi.org/10.54936/haoms231p14)

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Introduction: Displacement of foreign bodies into the maxillary sinuses during dental procedures is a rare entity. The most common causes are the iatrogenic dental procedures and the maxillofacial trauma respectively, according to the literature. The aim of this article is to present a case series of foreign bodies displacement into the maxillary sinuses due to iatrogenic dental procedures.

Material and Methods: Detection of the foreign bodies into the maxillary sinuses was achieved with radiologic methods and confirmed intraoperatively or later with the histopathology report. Minimal invasive procedure was the treatment of choice in all cases.

Results: Our study included 27 patients, 17 males and 10 females with mean age of 46.14 years (SD 10.35, range 18-65 years). The displacement of foreign bodies into the maxillary sinus concerned to fragments of teeth in 11 patients (40.27%), whole teeth in 4 (14.81%), dental implants in 5 (18.51%), dental impression materials in 2 (7.4%), endodontic treatment materials in 4 (14.80%) of which 2 associated with aspergillosis, fractured or not dental burs in 1 (3.7%). The occurrence of paranasal sinusitis due to foreign bodies displacement into the maxillary sinuses is time-dependent, the faster the treatment the better the outcome.

Discussion: Development of paranasal sinusitis due to displacement of foreign dental bodies into the maxillary sinuses is the physical outcome. Early surgical treatment is the key factor for to avoid sinusitis or minimize its occurrence.

Keywords: Foreign bodies, Maxillary sinus, Sinusitis, Tooth apex, Dental Implants

A MAXILLARY LESION WITH A RARE DIAGNOSIS; A CASE REPORT OF EWING SARCOMA

DOI: [10.54936/haoms231p15](https://doi.org/10.54936/haoms231p15)

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Objectives: Primary Ewing sarcoma of the head and neck is rare, representing only 3% of all Ewing sarcoma cases. The aim is to present a rare case of maxillary location of a Ewing sarcoma.

Case report: A 23-year-old male patient presented with a chief complaint of upper lip swelling attributed to a cystic lesion in the apical area left lateral maxillary incisor. Imaging showed an apical lesion of this tooth, indicating a broad osteolytic location. The lesion was removed, and a sample was taken for biopsy. The immunohistochemical findings agreed with a malignant bone tumor that exhibits features more compatible with the diagnosis of Ewing's Sarcoma. The patient underwent chemotherapy and radiotherapy. No signs of recurrence can be seen five years after treatment.

Conclusions: Most of the few published cases of primary Ewing sarcoma of the maxillary have been diagnosed as cystic lesions. Early diagnosis of head and neck Ewing sarcoma is essential for operating R0 surgeries that may not require radiotherapy. Each case's severity and needs should be evaluated to select the appropriate treatment regimen.

MULTIPLE CERVICAL SPACES' SECONDARY EMPHYSEMA CAUSED BY A MANDIBULAR ANGLE FRACTURE FROM ASSAULT, REPORT OF A CASE

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Objectives: To present a case of subcutaneous cervicofacial emphysema of a patient with a closed mandibular angle fracture after interpersonal violence.

Case Report: A 36-year-old male was transferred from a regional hospital after a referred interpersonal violence incident. The patient sustained a fracture of the left mandibular angle, as well as a right clavicular fracture, which was treated conservatively by the referring hospital. As depicted by the CT scan, a large emphysema involving the buccal, submandibular, pterygomasseterial and lateral pharyngeal spaces of the left side. Clinically the patient had a positive Hamman's sign. An open reduction was decided with internal rigid fixation. The postoperative course was uneventful.

Conclusions: Cervicofacial emphysema, despite not unusual in fractures involving the midface, due to communication with the paranasal sinuses, is a rather rare

complication of mandibular fractures. Proper clinical and imaging examination is required to exclude expansion of the air to the mediastinum, which can be a life-threatening complication.

Keywords: subcutaneous emphysema, mandibular fracture, trauma complications

HEAD AND NECK RECONSTRUCTION WITH FREE VASCULARIZED FLAPS; OUR EXPERIENCE

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Objectives: The available data of the use of free vascularized flaps in head and neck reconstruction in a single centre is presented.

Materials and Methods: All patients who received a free vascularized flap in our department in the past 5 years (2017-2021) were recorded.

Results: 21 patients were included, 20 oncologic patients and self-inflicted gunshot injury patient. As far as the oncologic patients are concerned, 10 patients received a free flap in the same stage as tumour resection, 4 received a free flap after disease recurrence, and 6 received a free flap after a disease-free period, either for a post-surgical correction of a deformity or to manage post-therapy complications, such as osteoradionecrosis or trismus. In total the survival rate of the oncologic patients is 60%. No major post-surgical complications were observed as far as the flap survival was concerned. The anterolateral thigh flap and fibula flap were the most preferred for reconstruction in 8 and 8 cases respectively. The radial forearm free flap was used in 3 patients and the gracilis flap in 2 patients.

Conclusion: The contribution of our Department in the use of free vascularized flaps, despite small, indicates that they can be effectively used in patients either as immediate reconstruction or a reconstruction in a 2-step approach. Mortality rates are associated with disease recurrence or other major comorbidities of the patients. This experience can be the basis for further expansion of the free flap reconstruction surgery in our Department.

Keywords: head and neck cancer, reconstruction, free flaps

REMODELLING OF THE SUPERFICIAL VASCULAR NETWORK OF SKIN FLAPS IN RATS, FOLLOWING A VASODILATORY CREAM APPLICATION

DOI: [10.54936/haoms23Ip18](https://doi.org/10.54936/haoms23Ip18)

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Objectives: The experimental study aims to demonstrate the output of a vasodilator agent application on skin prior and after a skin flap elevation and the possibility of the improvement of the flap survival rate

Materials and methods: The study was consisted of two groups and 28 rats were used. The experimental group concerned 28 right abdominal skin flaps that 10 days pre-surgically received iloprost cream (a prostaglandin PGI₂ analogue) and 4 sub-groups of 7 each one post surgically received 2.5, 5, 10, 20 µg/gr of iloprost, respectively. The control group concerned 28 right abdominal skin flaps that pre surgically received white petrolatum (placebo). Laser Doppler flowmetry and dynamic analysis of circulation (radioisotope ^{99m}Tc) were used to evaluate the flaps survival.

Results: The study led to highly comparable results between the study and the control group, as it turned out that the study group showed a mean value of 84.52 (47.70) PU while the control group's result was 38.06 (14.78), respectively (laser Doppler flowmetry). Statistically insignificant was the results for the 4 sub-groups of the study group. The dynamic analysis of circulation revealed hyperaemia for the iloprost applied skin flaps. Pathological examination did not show any inflammation on study group but some vacuum cells probably related to cream phagocytosis.

Conclusion: The application of iloprost on skin 10 days before flap elevation plainly leads to higher rates of flap survival rates.

Keywords: skin flaps, flap survival rate, iloprost, vasodilation

HEAD AND NECK RECONSTRUCTION WITH MAJOR REGIONAL FLAPS; WHAT THE COVID-19 PANDEMIC TAUGHT US

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Objectives: The aim of this study was to record the patients with advanced head and neck cancer who received a major regional flap for reconstruction in the COVID-19 pandemic period.

Materials and Methods: The surgical registry of a single centre was retrospectively searched for identification of patients who met the inclusion criteria of receiving a major regional flap for head and neck reconstruction, after resection of a locally advanced tumour, during the COVID-19 pandemic. The period recorded on this study as March 2020 to February 2021. All data available were recorded (tumour type, staging, operation, reconstruction) as well as post-operative follow up until up to date.

Results: 10 patients met the inclusion criteria. Mean age was 71.9 years old. 6 patients were newly diagnosed patients, whereas 4 were patients with recurrence. As far as staging is concerned, all had stage IV cancers, whereas 6 patients had T4 tumours, 2 T3 and 2 Tx. The latter 2 concern a patient with an occult neck mass of unknown origin and a patient with parotid adenocarcinoma. 4 patients were reconstructed with pectoralis major flap, 4 patients with cervicothoracic flaps, 1 with cervicofacial flap and 1 with deltopectoral flap. All immediate post-operative periods were uneventful but one, who presented a localized hematoma which required drainage. 5 patients appeared with a recurrence in the follow-up period of the first year and did not survive. The rest are surviving disease free with a mean follow-up period of 1.5 years.

Conclusion: Major regional flaps remain a valid alternative for head and neck reconstruction in patients with advanced head and neck cancer. The COVID-19 pandemic reduced the available human and technical resources for other types of flap reconstructions, forcing the use of regional flaps as the treatment of choice for advanced patients.

Keywords: locoregional flaps, oral cancer, head and neck cancer, reconstruction, COVID-19

SURGICAL TREATMENT OF MEDICATION RELATED OSTEONECROSIS OF THE JAW USING PRF

DOI: [10.54936/haoms231p20](https://doi.org/10.54936/haoms231p20)

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Medication related osteonecrosis of the jaw (MRONJ) is a severe side effect of antiresorptive therapy with increasing incidence and is defined as a condition of progressive bone destruction in the maxillofacial region of patients. Antiresorptive drugs such as denosumab promotes the inhibition of osteoclast differentiation and function and is commonly used to treat bone cancer¹.

This report aims to present a case of MRONJ in a 76-year-old male patient who suffered from metastatic clear cell renal cell carcinoma (ccRCC). The patient underwent radical nephrectomy and was given, among other drugs, denosumab. After 1 year, he visited to clinic with exposed and necrotic bone that probes to bone, associated with infection as evidenced by pain in the region of the exposed bone and, subsequently, the diagnosis was MRONJ Stage 2. The necrosis was treated surgically with the addition of an autologous platelet concentrate (platelet-rich fibrin, PRF). Wound healing, pain and oral health-related quality of life were assessed via clinical evaluation after 7, 14, 30 days, 3 and 6 months postoperative.

In conclusion, antiresorptive medications have close association to MRONJ in patients with poor oral hygiene and the antiresorptive treatment is recommended that should start after a careful dental preparation. Moreover, concerning MRONJ treatment, this case report indicate that when PRF is combined with successful surgical care, it can improve wound healing and has very promising results in tissue repair, regeneration, and growth.

INTRAORAL LIPOMAS: REVIEW OF LITERATURE AND REPORT OF CLINICAL CASES

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Introduction: Lipoma is a benign mesenchymal tumor composed of mature adipocytes. It is common in the head and neck region, although its appearance in the oral cavity is uncommon. Only 1-5% of the lesions are located in this area; representing 2.2% of all lipomas. The most common areas are the buccal mucosa, lips, tongue, palate, vestibule, floor of the mouth and retro-molar area.

Case presentation: Two patients were referred to our Department for treatment of a tumor located in the floor of the mouth. Clinical examination revealed a mass, soft, mobile, not attached to deeper planes and covered by mucosa which appeared normal but with a slight yellowish color.

The lesions were enucleated under local anesthesia with articaine 1: 100,000 4%, followed by incision, dissection, excision and suture using PGA 3/0. Macroscopically they were encapsulated lesions, easily enucleable and yellowish in color.

Conclusion: While intraoral lipomas are relatively uncommon, their clinical diagnosis is easy due to their yellowish color, and their usual location superficially beneath the mucosa. The differential diagnosis includes fibroma, dermoid cyst, minor salivary gland tumors, mucocele, hemangioma, lymphangioma, rhabdomyoma or neuroma.

ALVEOLAR RIDGE PRESERVATION IN THE AESTHETIC ZONE

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Introduction: Following tooth extraction various alterations in the aesthetic zone of the oral cavity can be expected. These are alveolar bone loss as well as structural and compositional changes of the covering soft tissues. Thus, the clinician is confronted with a challenging situation regarding the decision-making process required to provide an optimal treatment solution.

Purpose: To highlight the importance of preserving the alveolar ridge in the aesthetic zone as well as presenting the methods that exist to achieve it.

Method: A review of the literature of the last five years was performed, with keywords such as: alveolar soft tissue volume; assessment method; esthetic dentistry; extraction socket; wound healing.

Results: The criteria that affect the maintenance of the alveolar ridge, are the time of placement of the implant, the quality of the bone in the extraction socket and the amount of bone remaining in it. The clinician should also have a picture of the quality of the soft tissues that surround the bone socket.

Conclusions: It is very important to realize that the clinical decision-making process for alveolar ridge preservation in the esthetic zone starts before tooth extraction. The placement of a dental implant in the aesthetic zone can be performed after 2 months if the soft tissues remain

Intact. In all other cases where implant placement is not possible, alveolar ridge preservation procedures should be considered.

HORIZONTAL AND VERTICAL RIDGE AUGMENTATION AND ITS TECHNIQUES

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Introduction: A variety of traumatic events cause alveolar bone loss. These traumatic events include tooth loss, sinus perforation, periodontal disease, facial and dento-

alveolar trauma, oral pathologic lesions, and many other conditions. Ridge Augmentation is accomplished using both hard and soft tissue grafting procedures that intend to augment the alveolar ridge volume beyond the existing skeletal envelope.

Purpose: To highlight the importance of the regeneration of the alveolar ridge as well as the techniques involved.

Method: A review of the literature of the last five years was performed, with keywords such as: Alveolar ridge split; Block grafting; Bone augmentation; Distraction osteogenesis; Guided bone regeneration; Osteoperiosteal flap; Ridge expansion.

Results: There are different techniques for regenerating the alveolar ridge. The design and techniques are decided by the clinician depending on the needs of the patient and the size of the alveolar deficit. Now with the current materials available in the trade (bone grafts, collagen membranes) as well as the auxiliary equipment such as (tack pins, platelet derivatives) we can augment the ridge horizontally and vertically, thus reaching the legitimate result.

Conclusions: Alveolar ridge augmentation is a problem-solving pillar in the implementation of treatment plans. However, knowledgeable and skilled professionals should base their decision on the most effective and efficient surgical technique that would provide the patient with a long-lasting bony foundation for implant prosthetics.

SURGICAL TREATMENT OF TEMPOROMANDIBULAR JOINT ANKYLOSIS WITH COSTO-CHONDRAL GRAFT APPLICATION: CASE PRESENTATION

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Abstract: Introduction: Temporomandibular joint (TMJ) ankylosis is a serious condition that affects the

masticatory system and is referred as permanent movement dysfunction of the mandible caused by bilateral or unilateral fibrous or bony adhesions leading to numerous consequences. The causes may be congenital or acquired and include trauma, arthritis, infection, neoplasms, previous TMJ surgery etc. Surgical treatment consists of extensive resection of the ankylotic mass and reconstruction of the ramus-condyle unit with autogenous or alloplastic grafts. A combination of surgical treatment and physiotherapy is usually needed in order to achieve maximum rehabilitation and functionality of the mandible. The purpose of this poster presentation is to present the surgical management of an unusual case of unilateral TMJ ankylosis and review the literature.

Case report: A thirty-seven-year old male patient presented complaining of the inability to open his mouth since his birth. Clinical examination revealed congenital unilateral TMJ ankylosis. The lateral movement of the mandible was impossible. The patient was treated with resection of the ankylotic bone mass, replacement of the condyle with costo-chondral graft and replacement of articular disc with the temporal fascia. Since the surgery was completed the patient shows no signs of relapse.

Conclusion: TMJ ankylosis can be congenital or acquired. Its treatment requires detailed medical history, clinical and radiographic examination. Surgical resection of the ankylotic bone and coronoid process is necessary and a graft that resembles to the ramus-condyle unit can be placed. Immediate postoperative kinesiotherapy and regular recalls are of great importance.

EAGLE SYNDROME: ETIOLOGY, DIAGNOSIS AND TREATMENT. A LITERATURE REVIEW AND PRESENTATION OF CASES

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Abstract: Objectives: The aim of this poster presentation is to review the etiology, diagnostic process and management of Eagle syndrome. In addition, some cases diagnosed with Eagle syndrome are discussed.

Materials and Methods: Searches were conducted in Google Scholar, PubMed and Science Direct databases. Only English language results were reviewed. The following key words were used: "Eagle Syndrome" and "stylohyoid syndrome". Typical cases will be presented.

Results: Eagle Syndrome is a rare clinical condition (4–8 per 10,000 people) that presents with a variety of symptoms. It was first described by Eagle in 1937. It is more common in females than males (2:1 ratio) and in ages mainly greater than 50 years. Eagle syndrome is characterised by elongation of the styloid processes and/or stylohyoid ligament calcification, unilaterally or bilaterally. Due to its atypical symptoms, it is easy to be misdiagnosed. Common symptoms are: facial and neck pain, otalgia or temporomandibular joint pain, dysphagia/odynophagia, foreign body sensation. Other conditions related with Eagle syndrome are: ischemic attacks, carotid artery dissection and Horner's syndrome. The patient's history, physical examination and imaging are essential for management of this condition. Three-dimensional reconstructive computed tomographic (CT) scan remains the gold standard for diagnosis, as is shown in our case. Eagle syndrome is commonly treated either with conservative methods (e.g. analgesics, anticonvulsants, local injections) or surgically (intraoral or extraoral approach).

Conclusion: Eagle syndrome is rare and difficult to diagnose. Various specialists are involved in its management. Proper diagnosis and treatment are significant due to its potentially serious complications. Surgical treatment is more definitive and provides long lasting relief.

DENTAL IMPLANTS SURGERY AND SYSTEMATIC DISEASES

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Introduction: Dental implants surgery including guided bone regeneration has become common clinical practice nowadays as it is a well established method for complete or partial edentulous patients' treatment. A challenge for the clinician is commonly raised in cases where the patient suffers from a systematic disease or a local severe situation. The decision to proceed in dental implant surgery in such cases is often difficult to be taken.

Purpose and Methods: The aim of this study is to present the most recent data regarding the impact of various systematic diseases and conditions in dental implants surgery including guided bone regeneration. Research for this study was done by evaluating papers of the last decade from online databases such as: PubMed, Medline, and Google Scholar.

Results: Although for systematic diseases and conditions the published studies in relation to dental implants surgery are case reports, clinical and meta-analysis studies were also found giving very interesting findings. The most important systematic diseases have been studied, such as diabetes, osteoporosis and other bone diseases, cardiovascular diseases, endocrine or hematologic disorders, lung or liver problems, immunodeficiency etc. Conditions which affect the surgical results as medication, smoking, age, jaw radiation and chemotherapy must be considered before dental implants surgery.

Conclusions: While the level of evidence indicative of absolute and relative contraindications for implant therapy due to systemic diseases is low, it is important to know the implications of the systemic diseases or those produced by medications or various conditions in the oral cavity, in order to prevent failures in patients who are going to receive dental implant therapy or bone regeneration.