throughout treatment. The preplanned esthetic approach is a controlled, staged procedure in which every stage is a copy of the previous one, allowing for improvement where necessary. The final result fulfills the patient's expectations, agreed upon and documented at the outset.

The procedure follows these three steps:

1. Imaging. Imaging is based on esthetic evaluation and diagnosis of the patient. Composite resin and a black marker are commonly used to add or reduce tooth structure in this process. Documentation by photography and stone casts are used for reference and duplication. The proposed result should be approved by the patient.
2. Provisional restorations. The teeth are waxed according to the imaging models and then duplicated in acrylic resin. On delivery, the provisional restorations are evaluated functionally and esthetically and improved upon if necessary. The result is confirmed and agreed upon and documented again by photography and stone casts.
3. Final restoration. The final restoration is a duplicate of the provisional restoration. A technique of cross mounting is used to mount the provisional casts and the working cast on the same articulator. Silicone keys guide the dental technician in constructing the metal framework and the porcelain buildup.

This systematic approach can be applied in every dental procedure that involves changes in the esthetic zone. It ensures a better match between the patients expectations and the final result and promotes higher quality dentistry.

21.

Utilization of Guided Bone Regeneration Techniqes in Treatment of a Single Tooth Missing with Implant Supported Crown

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Guided bone regeneration is developing very dynamically in dental surgery and in implantology. It relies on building up bone in places where it is lacking, utilizing a variety of grafting materials. Methods of guided bone regeneration utilize biological materials or synthetic specimens. The use of autogenous platelets rich plasma derived in the thromboforetic process (COBE spectra system) allows the employment of growth factors, which blood platelets contain in the formation of new bone tissues. Usage of BioOss together with platelet rich plasmas allows the creation of a resorbable carrier for growth factor (auto-xenogenic graft).

The aim of the presentation is the analysis of clinical cases where usage of bone augmentation enabled the insertion of implants. Rebuilding the bone by means of guided bone regeneration facilitated the implant treatment and consequently the accomplishment of fixed prosthetics supported on implants.

22.

TMJ Disc and Condylar Displacement in the Frontal Plane

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It is known from the literature that an anterior disc displacement is as a rule associated with a dorsal and (or) superior condylar displacement, whereas a dorsal disc displacement is connected with an anterior displacement of the condyle in the intercuspal position. No investigations have been done on this subject in the frontal plane. MR investigations of the TMJs were carried out in 38 patients. Disc displacement in the frontal plane was analysed in 72 TMJs. In 47.2% it was associated with condylar displacement in this plane. In 55.5% medial disc displacement was connected with lateral condylar displacement, whereas lateral disc displacement was accompanied by medial displacement of the condyle ($p>0.05$) in 33.3%. Central position of the condyles was significantly more often (66.6%) noted in TMJs with lateral disc displacement than in TMJs with medial disc displacement (44.4%) ($p>0.05$). These results were confirmed by tomography in 40 TMJs.

CONCLUSION: There is a correlation between disc and condylar displacement in the intercuspal position, not only in the sagittal but also in the frontal plane. To avoid a mistake in the establishment of maxillo-mandibular relationship both the condylar and the disc position should be taken into consideration.

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23.

Treatment Considerations for Mandibulectomy Patients

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Prosthetic rehabilitation of patients after resection of the mandible due to operation of malignant tumors usually poses a great problem. Loss of tissues and damage caused by radiotherapy cause various functional deficiencies and dysfunction in the stomatognathic system.

The study concerned treatment of a group of mandibulectomy patients with problems related mainly to restoration of jaw relationship, lack of occlusion and dysfunctions. In the escamined cases immediate or delayed reconstructive surgery had been completed before prosthetics to treat mandibular discontinuity defects. Unfortunately, many of the patients exibit lack of occlusion, mandibular deviations and torque due to incorrect muscle activity. Prosthetic management was part of a multidisciplinary approach to the problem. Treatment included myotherapy, gradual occlusal rearrangement with the use of therapeutic and corrective splints, special appliances and prostheses with leading inclined planes and guiding surfaces. The degree of success was related to the location and extent of the mandibular resection, the shape of the bone transplants and presence or absence of natural teeth. The aims of treatment realised were the restoration of acceptable occlusion and improved functional efficiency of the masticatory system.

24.

Comparison of the Nasality of the Unoperated Soft Cleft Palate Patient, with and without Obturator

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Prosthetic rehabilitation of the patient with a cleft soft palate has three main objectives. Foremost is the need to improve the function of speech and comfortable swallowing, that are impaired by the potency of the soft palate, which allows the escape of air or fluid into the nasopharynx and nasal cavity.

Unrepaired clefts of the soft palate produce a deficient velar-pharyngeal seal and require the construction of an obturator toward the speech bulb.

Measurement of the nasality of a patient wearing a speech bulb for 18 years is described in this paper. This was done by means of Nasal View System, Tiger Electronics Inc. (Seattle, WA), which developed this system based on the work of Awan (1996, 1997).

The Nasal View system is a PC/Windows based system, which enables the recording of high-resolution speech signals using Windows compatible sound cards (sampling at up to 44100 Hz at 8 or 16 bits of resolution).

The hardware components included in the Nasal View system include headgear and a portable custom dual-channel pre-amplification unit.The key component of the headgear is a rigid plate, constructed of 5 mm thick styrene, which is used to separate an oral from a nasal microphone.The special sentence was used for our assessment. In this sentence 5 sounds out of 28 are nasal sounds (17.86%).

The results are as follows:

With the obturator in place the values of nasality were: Ave 19.32% SD 14.31%, Max 66.53% Min 1.28% Median 15.04% Mode 12.70%.

The measurements of nasality without the obturator were: Ave 41.31% SD 24.39% Max 97.03% Min 7.61% Median 30.02% Mode 23.26%.

Nasality measurement is displayed in the histogram of the nasality distribution, in the real-time analysis, power spectrum, LPC spectrum power and LPC spectrum, and in spectrograms.