

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 Techniques in Treatment of a Single Tooth Missing with Implant Supported Crown

**Adamczyk E¹, Gładkowski J¹, Machnikowski I¹,
Mierzwinska E¹, Spiechowicz E¹, Feder T¹,
Wojtowicz A², Matenko D², Ciechowicz K.²**

¹Department of Prosthodontics, Medical Academy,
Warsaw

²Department of Oral Surgery, Medical Academy,
Warsaw, Poland

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

**Kleinrok M¹, Wegłowska A¹, Piórkowska B¹,
Kuzioła A¹, Szybinski W², Janczarek M³,
Kostrzewa M.⁴**

¹Department of Prosthetic Dentistry, Subdepartment of
Craniomandibular Disorders, Medical Academy, Lublin

²Stomatological Clinic, Medical University, Lwów

³Department of Interventional Radiology and
Neuroradiology, Clinical Hospital, Lublin

⁴Department of Children Radiology, DSK Medical
Academy, Lublin, Poland

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.