

Training period in the Department of Cranio-Maxillofacial Surgery of Muenster.

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The time I spent at the Department of Cranio-Maxillofacial Surgery of Muenster, Germany, directed by Prof. Ulrich Joss, was from the 6th of October 2009 to 15th of November 2009. During that period, I was able to witness a lot of interesting and different cases, because the clinic covers the whole range of Oral and Cranio-Maxillofacial Surgery, especially Orthognatic surgery, Implantology, Traumatology, Craniofacial malformations and Oncology surgery. This wide variety of treatments is linked with a high level of efficiency and technology. Especially, the philosophy of management the occlusal and condylar problems in Orthognatic surgery is very important for my formation, allowing a deepening of problems connected with temporomandibular joint and condylar position. The approach to condyle in orthognatic patients is controversial because the real position of condyle in the fossa before treatment is unknown, like its best position in the new arrangement after surgery. They think that the best way to replacement the condyle is positioning the head in a neutral position and check the occlusion. However, the most interesting thing is the use of semi-rigid plates employed in the mandible after the sagittal split osteotomy. Infact, the use of sagittal split plates with slider (Modus^R OSS 2.0) for mandible leaves the condyle to adapt to the new situation, avoiding problems with regard to temporo-mandibular joints and condylar resorption. To this end, they introduced a follow-up radiography performed two months after surgery showing a considerable change of plate shape and consequent condylar repositioning. This adaptation was without modifications of occlusion. Moreover, this kind of plate permits to check the occlusion during the operation and change the mandible position without more bone holes. The fixation is always performed using an angle screwdriver, avoiding the trans-buccal approach. Besides, in Orthognatic Surgery they make use of a copious set of techniques including the classic Obwegeser-Dal Pont for the sagittal split of the mandible and the Le Fort I osteotomy for maxilla, segmental maxillary osteotomies, mandibular midline to manage the transversal dimension, maxillo-mandibular distraction (utilizing intraoral devices) and SARPE. This wide range of techniques allows an individual treatment for each patient answering to specific needs.

The most interesting thing in Traumatology is the treatment of condyle fractures using the Condyle Plates (M-4654, M-4656, M-4658). The most frequent approaches utilized in this Department to treat condyle fractures are the submandibular or retromandibular or preauricular approaches. The use of hexagonal or triangular shaped plates permits to manage either the rotational or the sagittal forces acting on the fractured condyle. An analogous school of thought encourage to employ parallel plates (Grid Plates M-4628, M-4630, M-4632, M-4634) in the mandibular angle fractures, controlling the forces acting on the upper and lower edges of mandible with a single easy plate placed on the midline along the canal of inferior alveolar nerve.

In Oncology Surgery, I saw different techniques to reconstruct maxillofacial defects after tumour removal and neck dissection. In particular, the free flap most frequent used was the radial forearm, utilized with a reconstructive plate when it was necessary to restore the jaws defects. Pedicled flaps like naso-labial or pectoralis major are employed in different cases to fill the gap.

This ability managing a so big range of diseases is associated to a big expertise and a very well organization in a avant-garde Hospital.

This was a wonderful experience in my training because I deepened my knowledges following very good and helpful teachers and seeing a very good and organized system for health care.