

318. DENTAL IMPLANT COMPLICATIONS

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Introduction: Implantology has known a remarkable evolution over the past 15-20 years. Dental implants are the first treatment option in tooth loss. Modern concepts and aspects in dental implantology are widely discussed nowadays, while errors and complications are not as well studied. Complications in implant treatment are being discussed more frequently within the recent international conferences. According to (Annibali S. et al. 2009), the complications in implant-prosthetic treatment are divided by the moment of appearance. The immediate complications are: infection, swelling, bruising and hematoma, emphysema, bleeding, flaps dehiscence, sensorial disturbances. The late complications are: mucositis, periimplantitis, disintegration of the implant, gingival retraction, secondary nervous lesions, impact fracture. The purpose of the study is evaluation of implantological treatment complications and developing prophylaxis measures.

Materials and methods: The study group is represented by 20 patients, on which 68 implants were inserted. The patients with implant fracture and periimplantitis were selected, according to Annibali S. et al classification. The average age is 52,3 years, the oldest patient was 82 years old and the youngest was 29 years old. 70% of the patients were women, 30% men. 60% of the implants were inserted in the mandible and 40 in the maxilla. The approach towards the affected implants was determined by the scale proposed by James and modified by Misch.

Results and discussions: Periimplantitis was determined in 90% of the patients and implant fracture in 10%. Periimplantitis in the pre-prosthetic stage has been noticed in 35% of the patients. In the post-prosthetic stage in 65% of the patients. In 95% of periimplantitis, dental implants were used in partial edentations and only 5% in total edentations. From all the inserted implants, Alpha-Bio Tec implants were involved in 45% of the complications, Dentium implants were involved in 20% of cases, 10% blade implants, one stage implants in 25%. The average value of the defects is 4,86 mm, the highest defect is 7,51 mm and the lowest 1,79 mm. From the total of 45 teeth, 22 were extracted, which is 48,8%. The study has shown that pre-prosthetic and post-prosthetic complications have different etiology and the incidence is determined by the type of the used implants, upper or lower jaw localization, partial or total edentation. According to the obtained information, the following methods of prophylaxy are proposed: thorough pre-prosthetic preparation, minimal intra-operative trauma and using external and internal cooling systems, avoiding over-lifting the flap, careful tissue management, minimal mechanical and thermic bone trauma, performing X-ray, total removal of the fixing cement, occlusal integration of the prosthesis.

Conclusions: Implementation of prophylactic measures and an interdisciplinary approach of the patients are necessary in order to prevent implantological complication.

Keywords: peri-implant complications, periimplantitis, implant fracture.