Dental Implants and Peri-Implant Diseases

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Keywords
Dental implants; Peri-implantitis; Peri-implant mucositis; Peri-implant complications; Peri-implant diseases and treatments; Systematic reviews; Meta-analyses

Editorial
Dental implants are considered the treatment of choice to replace missing teeth. The treatment of partially or totally edentulous subjects with dental implants is a common procedure and proven effective based on high survival rates and long term predictable outcomes. Biological complications commonly grouped as peri-implant diseases occur around implants which are peri implant mucositis and peri-implant it is [1-3]. Peri-implant mucositis is pathological condition which is normally localized in the soft tissues surrounding an oral implant. The recently consensus report recommended that "diagnosis of peri-implant mucositis requires presence of bleeding and/or suppuration on gentle probing with or without increased probing depth compared to previous examinations and by the absence of bone loss beyond crestal bone level changes resulting from initial bone remodeling" [4]. Successful treatment of peri-implant mucositis will prevent its progression to peri-implant it is, Peri-implant it is is surrounding oral implants is an inflammatory process affecting the soft and hard tissues resulting in rapid loss of supporting bone associated with bleeding and suppuration. Peri-implant it is is defined by the presence of bleeding and/or suppuration on gentle probing, increased probing depth compared to previous examinations and by the presence of bone loss beyond crestal bone level changes resulting from initial bone remodeling [4]. In the clinical situation where previous examination data are not available, 'diagnosis of peri-implant it is requires probing depths of ≥ 6 mm and bone levels ≥ 3 mm apical of the most coronal portion of the intraosseous part of the implant in addition to the presence of bleeding and/or suppuration on gentle probing" [4]. The diagnosis of peri-implant diseases is usually established by assessing Probing Depth (PD), Bleeding on Probing (BOP), mobility, presence of pus and radiographic bone resorption examinations. In addition, a combination of clinical registrations combined with radiographic signs of possible crestal bone loss is needed for differential diagnosis [5-12]. The etiopathogenesis of peri-implant diseases is related to the peri-implant environment and to the soft tissues/implant interface, to patient-related factors and to host-parasite equilibrium. Peri-implant diseases can become a concern because of inadequate/poor oral hygiene, lack of keratinized tissue, heavy smoking, systemic conditions such as uncontrolled diabetes, immune suppressed, remnants of cement, poor prosthetic implant positioning, lack of cleans ability of the implant-supported restoration, abut men characteristics, and not participating in maintenance visits [12-14].

A wide range of prevalence's of peri-implant diseases has been reported to amount to 43% (range: 19% to 65%) for peri-implant mucositis and to 22% (range: 1% to 47%) for peri-implant it is in the literature [6,9].

Different therapy approaches have been used in the treatment of peri-implant diseases including nonsurgical (i.e., mechanical instrumentation, lasers, chemical detoxification, and antimicrobial agents) and surgical supportive therapy (i.e., resective or regenerative surgery with and without surface modification of the implant, and removal of failing implants), individually or combined [11,14]. Despite the current understanding of peri-implant diseases, the management of the second it ions remains unpredictable, with no general acceptable consensus, which remains that effective surface decontamination is a prerequisite [8].

Routine and regular examinations of patients with dental implants are currently recommended and consistent with well-established procedures to prevention of disease of dental implants, and to maintain periodontal health.

References


