Immediate loading on anterior single immediate implant. A case report

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Immediate implantology is a prosthetic-surgical restoration technique of great clinical and scientific interest, as evidenced by the fact that among the 300 most cited articles in dental implantology publications, we can find in fifth place an article of immediate loading. This interest seems to be consolidated with a greater total number of publications on this sub-discipline of implantology and an increase in research production focused on immediate implantology.

The first report of successful immediate placement of ceramic implants after tooth extraction is made by Professor Wilfried Schulte, although the clinical practice of immediate implantology is already described by Jourdain and Maggiollo in their manual in 1807, where it is described, from empiricism and observation, the reabsorption of the post-extraction socket, as well as the partial end of the process when placing an implant, providing, in addition, a careful atraumatic extraction technique to preserve the alveolus and recommending the load of the crown a month after placement.

Currently, the advantages of immediate implantology are several: less morbidity, fewer interventions and the possibility of an aesthetic provisionalisation when immediate loading is carried out in the anterior sector. An adequate indication and selection of the case is always recommended.

The aesthetic parameters described by Kois JC (2001) help us to make an adequate prognosis of the peri-implant aesthetic result before performing the extraction. According to Buser et al. (2017), the cases indicated for this type of treatment would represent only 5-10% of the single teeth to be extracted in the aesthetic zone.

Therefore, rigorous selection criteria must be applied and it is recommended to have experience in the practice of implantology before dealing with this type of cases, as it is a categorised treatment of advanced difficulty.
Clinical case

A patient attends the consultation referred by her dentist due to an unrestorable coronary fracture of tooth 12 (figs. 1 and 2). The patient was reluctant to place a conventional prosthesis, so it was decided, after conventional clinical and radiological examination and CBCT, the placement of a Zinic® implant (Ziacom®), 3.3 x 11.5 mm, post-extraction and the fabrication of a composite crown as an immediate aesthetic provisionalisation. When performing the occlusion evaluation, an insufficient canine guide is observed, which will force the fabrication of a slightly shorter provisional crown, in order to avoid lateral loads that could lead to failure of the restoration (fig. 3).

The atraumatic extraction and a meticulous alveolar curettage are performed (fig. 4). After checking that the alveolar sides have been preserved, "palatal corrected" drilling is carried out for an ideal 3D position of the implant (fig. 5). The procedure is evaluated intra-surgically with a periapical radiography (fig. 6).
Implant placement is performed (fig. 7). The primary stability achieved will be decisive when it concerns immediate aesthetic treatment that does not compromise the osseointegration of the implant (fig. 8). It is necessary to check the accurate fit of the implant mount used in the fabrication of the provisional abutment (fig. 9).

Successive controls will be carried out to assess the good evolution, after which the final crown will be made (figs. 10 to 12).
A correct selection of the case and a meticulous surgical management, with an adequate selection of the materials, allow to carry out an immediate implantology that reduces the surgical times and increases the patient’s satisfaction with the received treatment.

Bibliography


4 Jourdain A, Maeggiolo J. Le manuel de l’art du dentiste.
