



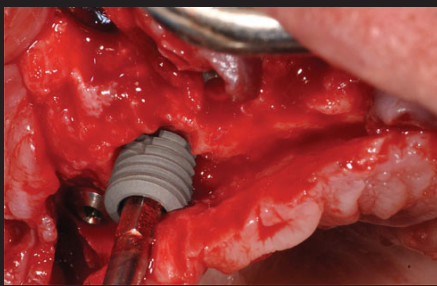
FIXED REHABILITATION OF ATROPHIC MAXILLA WITH AN IMPLANT IN THE NASOPALATINE CANAL



CASE REPORT: Case report: A 48-year-old male patient went to our clinic with the purpose of fixed implant rehabilitation of the upper jaw. The periodontal diagnosis indicated the presence of severe generalized chronic periodontitis, with great involvement of several teeth, including all upper (Figs. 1-4). Radiographic evaluation showed reduced bone quantity, with great pneumatization of the maxillary sinuses (Fig.1). Because it was an extreme case in terms of available bone, we decided to place five implants, with the placement of one implant on the nasopalatine canal. The other implants were placed in the remaining maxillary bone (Fig. 5 and 6). During osseointegration period, the patient used a removable prosthesis.



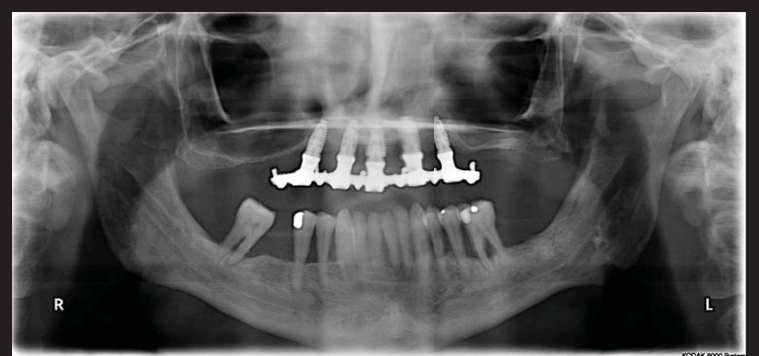
There were placed implants ID^{CA}M (IDI[®], France), with internal connection (morse-taper) and platform switched. All implants were 4,2 x 10 mm, except the implant placed in the nasopalatine canal (5,2 x 10 mm). After 3 months of osseointegration, second surgical stage was performed and a metal-acrylic hybrid fixed prosthesis was fabricated (Fig. 7). The framework was tested according to "one screw test"¹ (Fig.6), with radiographic confirmation.



DISCUSSION: Although the implants were placed in a palatal position, the patient didn't demonstrate problems with speech. These results are similar to those of Peñarrocha et al², who placed 330 implants in a palatal position to rehabilitate 69 patients with severely resorbed edentulous maxillae to support 69 fixed prostheses. Patients reported a high level of satisfaction with these full-arch fixed prostheses, and a low score for speech was not observed. In this clinical case, the nasopalatine neurovascular bundle was removed and implant site preparation was then performed (Fig.5). However, the patient didn't refer any sensory loss. In the literature, there are described some cases where sensory loss was referred but was transitional and minimal^{3,4,5}.



CONCLUSIONS: According to some studies, the placement of implants in the nasopalatine canal can offer a viable treatment approach for the rehabilitation of the severely atrophic maxilla, with great satisfaction of patients. The described procedure was successful, returning the patient's confidence in his smile (Figs. 9-12).



SOURCES
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2. Peñarrocha M, Carrillo C, Borronat A, Balaguer J, Peñarrocha M. Palatal positioning of implants in severely resorbed edentulous maxillae. *Int J Oral Maxillofac Implants.* 2009;24:527-533.
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4. Peñarrocha M, Carrillo C, Uribe R, García B. The nasopalatine canal as an anatomic buttress for implant placement in the severely atrophic maxilla - a pilot study. *Int J Oral Maxillofac Implants.* 2009;24:936-942.
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