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## MULTIDISCIPLINARY REHABILITATION IN ORTHODONTICS, PERIODONTOLOGY, IMPLANTOLOGY, PROSTODONTICS AND AESTHETICS: CLINICAL CASE

**CASE PRESENTATION:** A healthy 34 year old male patient came to the surgery, unhappy with the aesthetics of his smile. His main concerns were to improve mastication and correct the aesthetics. After compiling a history, and following complete clinical and radiological examinations, orthodontic treatment was planned as well as fixed prosthodontics in order to replace tooth 11, which the patient had lost due to trauma and the edentulous area was rehabilitated with a Maryland bridge that needed replacement. The treatment consisted in aligning the dental arcades, and reestablishing occlusion, followed by a conservative fixed prosthesis, with the use of an implant to correct the edentulous area. Pink aesthetics, increasingly important these days, were remodelled and corrected during gingivectomy on the 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> sextants. Finally, it was decided to apply veneers to 12 and 21, in order to harmonize the three anterior teeth.







Fig. 1 - Initial intra-oral photo

Fig. 2 -Initial profile tele-radiography and orthopantomography

Fig. 3 - Intra-oral photo previous to implant placement

**DISCUSSION:** Fixed rehabilitation with ceramic veneers and crowns is accepted practice in the scientific community, achieving significant durability since this material has similar mechanical and esthetic properties to the natural tooth. The use of veneers in this case was driven by the desire for a minimally invasive intervention, as opposed to the more extensive dental preparations necessary to the use of crowns. The use of an implant to replace just one tooth was a more comfortable and attractive option for the patient, when compared to the use of an adhesive prosthesis, or a removable partial one, and is also a more conservative choice than the use of a bridge, since it doesn't require intervention on healthy teeth. Therefore, the choice in this clinical case was to preserve as much as possible the existing dental structures, while fulfilling the aesthetic and functional needs of the patient



Fig. 4 - Implant exposure (second surgical fase)



Fig. 7 - After orthodontic treatment, implant and gingivectomy





Fig. 8 - Correct shape of teeth 11, 12 and 21



Fig. 6 - Post or thodontic treatment and implant placement profile tele-radiography and or thopantomography



Fig. 9 - Venneer preparation using mock-up

**CONCLUSION:** The multidisciplinary approach to this clinical case proved very effective in meeting the aesthetic and functional needs of the patient, achieving dental and and soft tissue harmony of the anterior sector. The rehabilitation and prosthetic plan perfectly achieved the original requirements.



Fig. 10 - Final veneer preparation



Fig. 11 - Provisional veneers on 12 and 21 and provisonal crown on 11  $\,$ 

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Fig. 12 - Definitive impression on the implant and definitive veneers  $% \left( {{{\rm{T}}_{\rm{T}}}} \right)$ 







Fig. 13- Definitive crown and post placement x-ray



## Fig. 14 - Final smile



## Fig. 15 - Occlusal view of the final smile

