

# CLINICAL CASE

USING BOTH IMMEDIATE LOADING AND  
ONE ABUTMENT ONE TIME CONCEPTS  
WITH HELIX<sup>®</sup> GM NARROW TO SOLVE AN  
ESTHETIC DEMAND



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RESPONSIBLE SURGEON



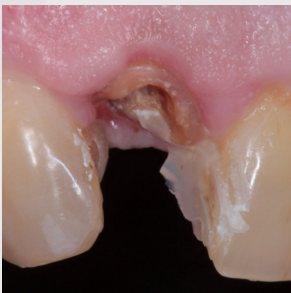
## DR ALEXANDRE MARQUES

### BRAZIL

Graduated in Dentistry at Gama Filho University (2005)

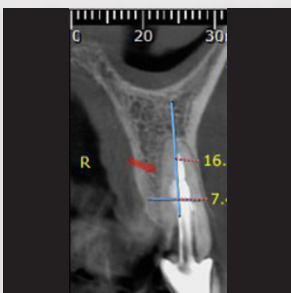
Master in Dentistry from at Veiga de Almeida University (2017)

PhD in Dentistry at Estácio de Sá University (2022).



## PATIENT MEDICAL HISTORY

A healthy patient attended the dental office complaining about a fracture of the upper right lateral incisor (12). At the clinical examination, a tooth fracture was found at subgingival level and confirmed by image examination (periapical radiography and computed tomography). Due to a limited inter-dental space region, it was proposed to the patient a narrow diameter implant (Helix® GM Narrow) and immediate loading.



## PLANNING

After the image exams analysis, the proposed plan was the immediate placement of a 2.9 x 14mm Helix® GM Narrow and the confection of an immediate single cemented temporary crown. The decision of using a narrow implant was due to the reduced inter-dental space between teeth 13 and 11, favoring especially the maintenance of the interdental papillae.

## DESCRIPTION OF THE PROCEDURE

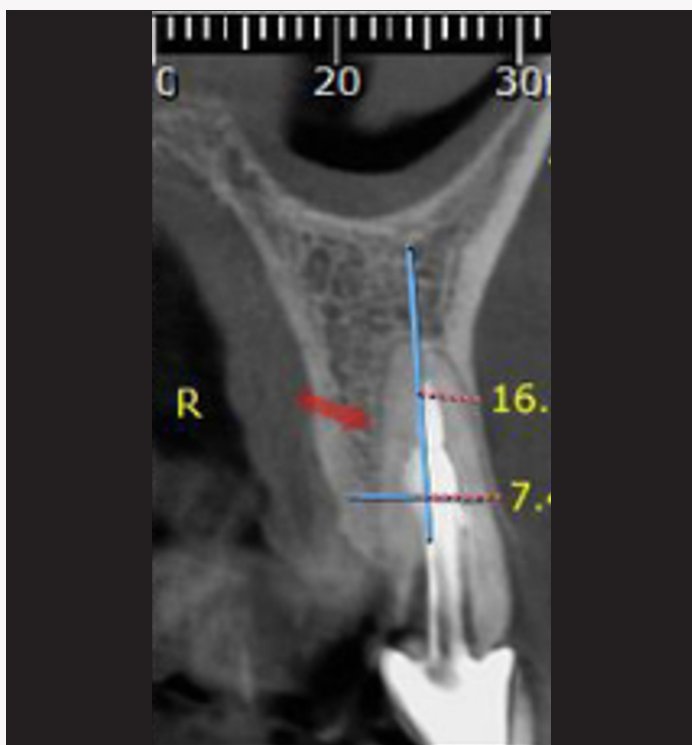
With the patient previously anesthetized, the tooth 12 was atraumatically extracted with periostomes for the tooth's luxation. The drilling protocol was performed following the manufacturer's guidelines. At the end of the instrumentation, a Direction Indicator was placed to confirm the three-dimensional positioning of the implant perforation inside the socket. Then, the 2.9 x 14mm Helix® GM Narrow was placed with 35N.cm of torque, which allowed immediate loading. Using the "One Abutment One Time" concept, a NGM Exact Click Universal Abutment with a transmucosal height of 1.5mm was used to receive an immediate temporary crown made of composite resin. To fill the gap between the implant and the vestibular wall of the socket, a synthetic bone substitute was used (Straumann maxresorb). The temporary crown was properly installed, the sutures and the final x-ray were performed. After 15 days, the patient returned to the office and the suture was removed.

## PROSTHETIC DESCRIPTION

After three months, the patient returned to the final crown confection. The temporary crown was removed, and it was possible to observe a healthy peri-implant mucosa and with the preserved contour, including the interdental papillae. After 10 days, the lithium disilicate crown which was cemented on the NGM Exact Click Universal Abutment with resin cement. At the end of the treatment, a periapical radiography was taken, and it was possible to observe the adaptation of the prosthetic crown and the maintenance of the bone around the implant.

## NEODENT® MATERIALS

- Helix® GM Narrow 2.9 x 14mm
- NGM Exact Click Universal Abutment



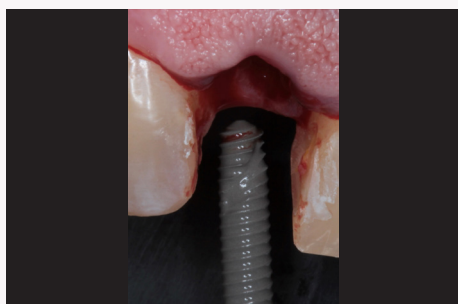
1. Initial tomographic aspect.



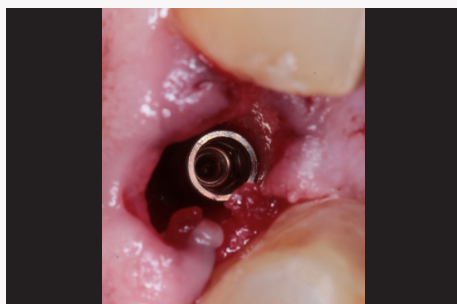
2. Initial clinical aspect, buccal view.



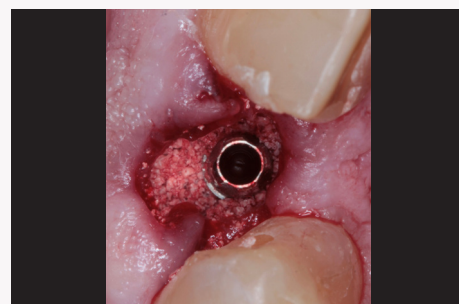
3. Intraoral aspect during the drilling protocol.



4. Intraoral aspect during the implant placement of the Helix® GM Narrow with 35 N.cm of torque.



5. Occlusal view of the Helix® GM Narrow implant placed.



6. Occlusal view of the buccal gap filled with synthetic bone substitute (Straumann maxresorb).

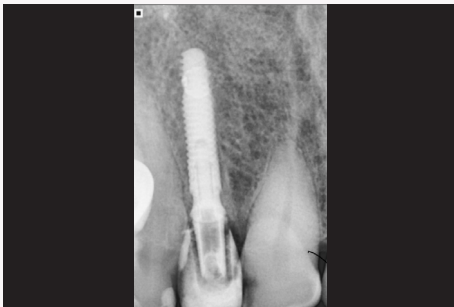
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7. NGM Exact Click Universal Abutment placed, buccal view.



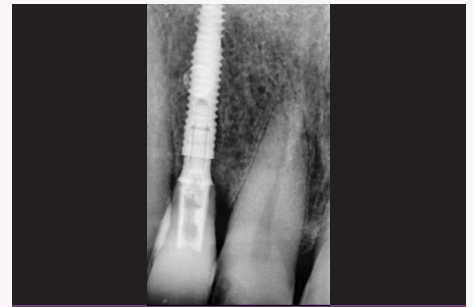
8. Intraoral aspect after cementation of the temporary prosthesis.



9. Radiographic aspect after cementation of the temporary prosthesis.



10. Intraoral aspect after cementation of definitive prosthesis.



11. Radiographic aspect after cementation of definitive prosthesis, three months after the surgery.

LEARNING OUTCOMES FROM THE DOCTOR

Questions and answers

PROFESSIONAL OPINION ABOUT THE PRODUCT AND PROCEDURE, FOCUSING ON YOUR LEARNING WITH THE CASE

*Narrow diameter implants are extremely recommended in regions where interdental space is reduced, favoring mainly the maintenance of the emergence profile and interdental papillae. In this way, certain aesthetic complications can be avoided, such as black spaces in the anterior region.*

WHAT WERE THE OTHER TREATMENT OPTIONS? WHY CHOOSE THIS SOLUTION?

*Orthodontic treatment to increase interdental space. The choice for a narrow implant was made due to the patient's age and his report of not wanting to undergo orthodontic treatment.*

WHAT WERE THE CHALLENGES DURING THE TREATMENT AND HOW WERE THEY SOLVED?

*Narrow diameter implants must be installed after an osteotomy in accordance with the manufacturer's guidelines, ensuring better locking and must be installed very cautiously to avoid touching the roots of the surrounding teeth with the implant since, the space was quite limited in this case.*

TIPS

*Follow the instructions provided by the manufacturer exactly.*

Dr. Alexandre Marques

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It is the clinician's exclusive responsibility to evaluate the patient's health conditions and viability of the procedure. The reproduction of this clinical case does not imply the success of similar procedures, as it will depend on the clinician's technique and ability, on patient's conditions on the previous and post procedure.

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*NUOVI SORRISI OGNI GIORNO*

*CHAQUE JOUR DE NOUVEAUX SOURIRES*

*новые улыбки каждый день*

*JEDEN TAG EIN NEUES LÄCHELN*

*NUEVAS SONRISAS TODOS LOS DÍAS*

*NYA LEENDEN VARJE DAG*

*NEW SMILES EVERY DAY*

*NOVOS SORRISOS TODOS OS DIAS*

*CHAQUE JOUR DE NOUVEAUX SOURIRES*

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