

# Nobel Biocare N1™ concept in the posterior maxilla with sinus floor elevation

Bilbao, Spain

**Dr. Oded Bahat**, Beverly Hills, CA, USA

**Dr. Ion Zabalegui**, Bilbao, Spain

**Dr. Eva Berroeta**, Bilbao, Spain

**Mr. Javier Pérez**, Lugo, Spain





Dr. Oded Bahat



Dr. Ion Zabalegui



Dr. Eva Berroeta



Mr. Javier Pérez

**Patient**

Female, 47 years

**Clinical situation**

Healed site at tooth position  
15, 16 (FDI) with bone resorption

**Surgical solution**

Placement of two implants with  
simultaneous sinus floor elevation

**Restorative solution**

2 Single crowns

**Surgery date**

Bilbao, April 25, 2019

**Total treatment time**

12 months

**Tooth position**

15, 16 (FDI) 3,4 USA

Implant placement  
associated with  
immediate sinus floor  
elevation at sites with  
inadequate vertical  
bone height.

## Initial clinical situation

## Treatment planning

## Surgical procedure

## Outcome



Healed site before surgery. Lateral view



Healed site before surgery. Occlusal view

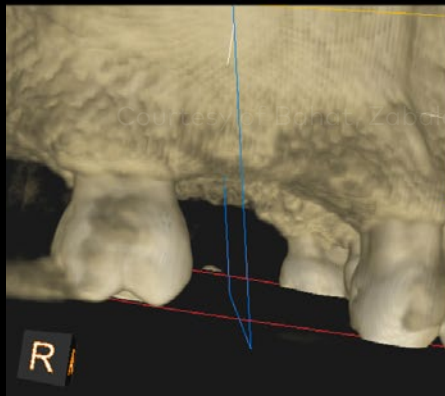
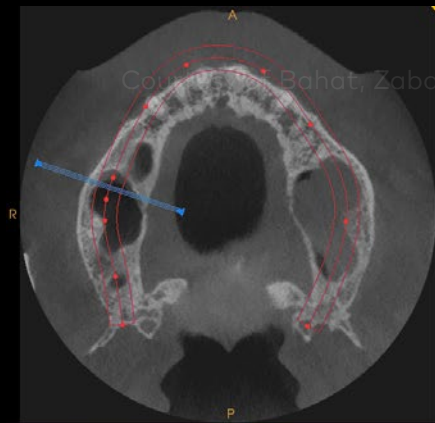
## Partial edentulism right side maxilla with vertical ridge deficiency

## Initial clinical situation

## Treatment planning

## Surgical procedure

## Outcome



Dr. Oded Bahat, Dr. Ion Zabalegui; Dr. Eva Berroeta; Mr. Javier Pérez

CBCT Pre-op

**CBCT illustrating inadequate vertical bone height, right side and healthy sinus. Mucosal thickening left sinus.**



## Initial clinical situation

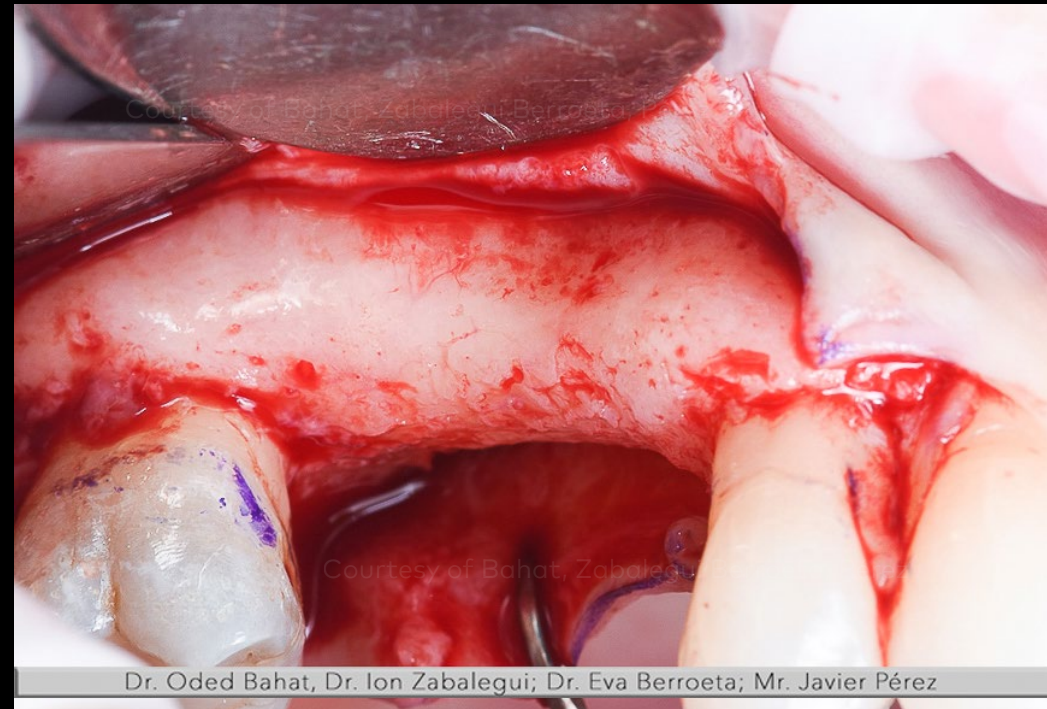
## Treatment planning

## Surgical procedure

## Outcome



Marking of flap



Buccal view of ridge

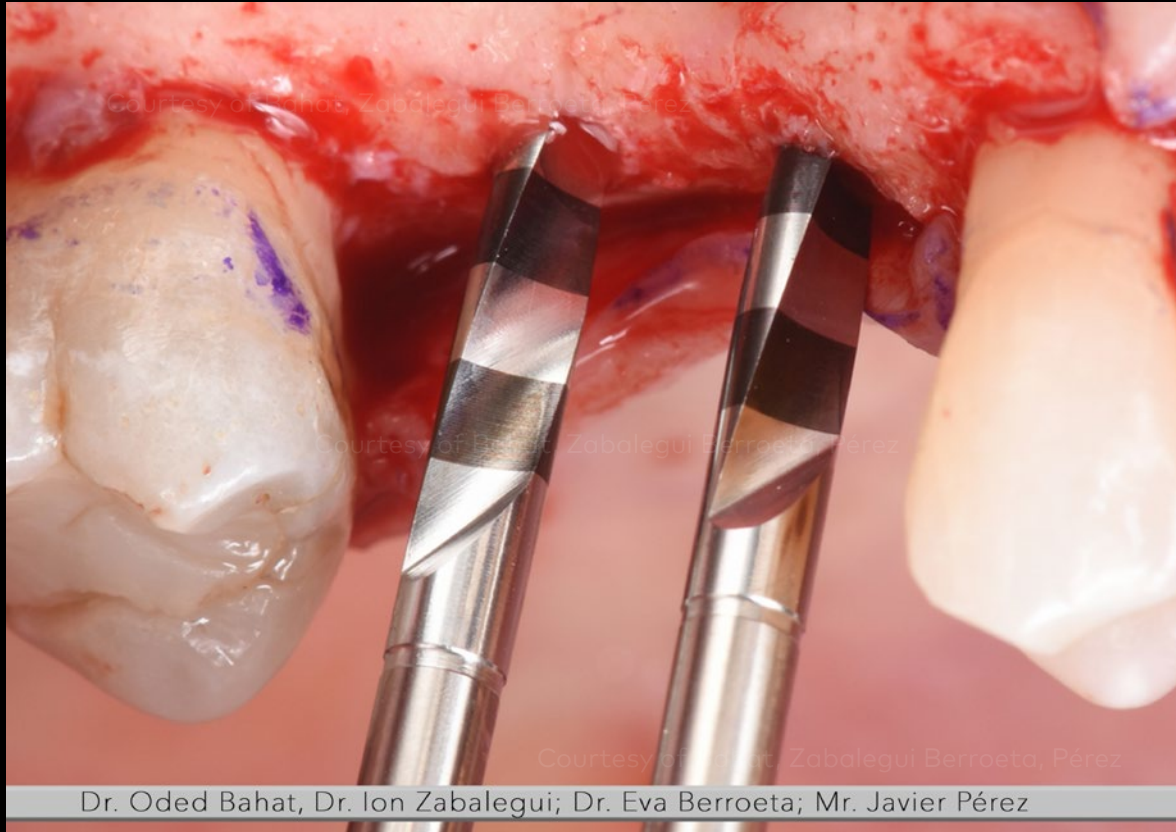
## Flap delineation and full thickness elevation

**Initial clinical  
situation**

**Treatment  
planning**

**Surgical  
procedure**

**Outcome**



OsseoDirector™ instruments (2000 rpm with irrigation)  
Initial osteotomy with the OsseoDirector instrument. The final length and implant position established.

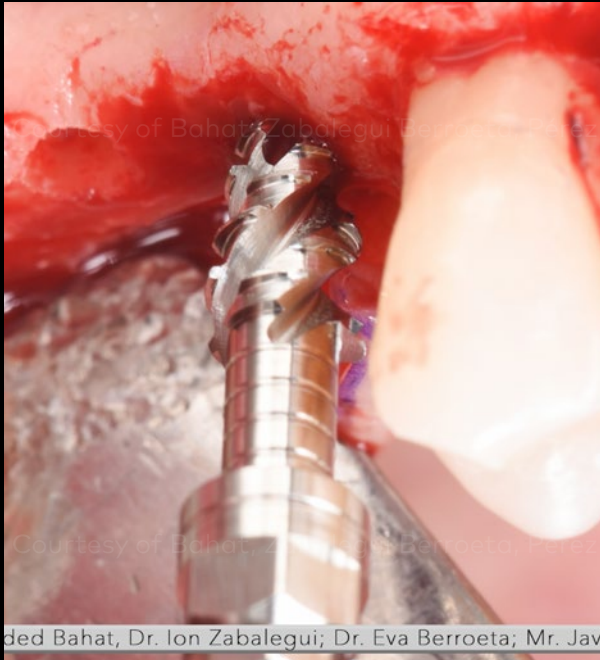
**Direct**

## Initial clinical situation

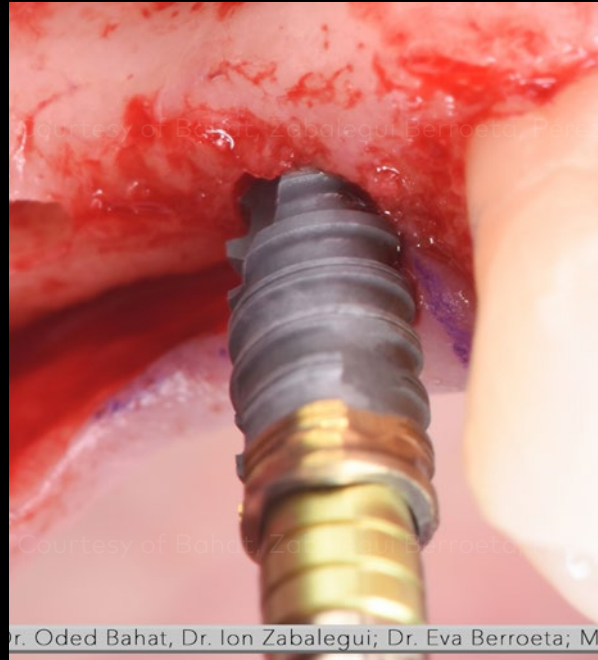
## Treatment planning

## Surgical procedure

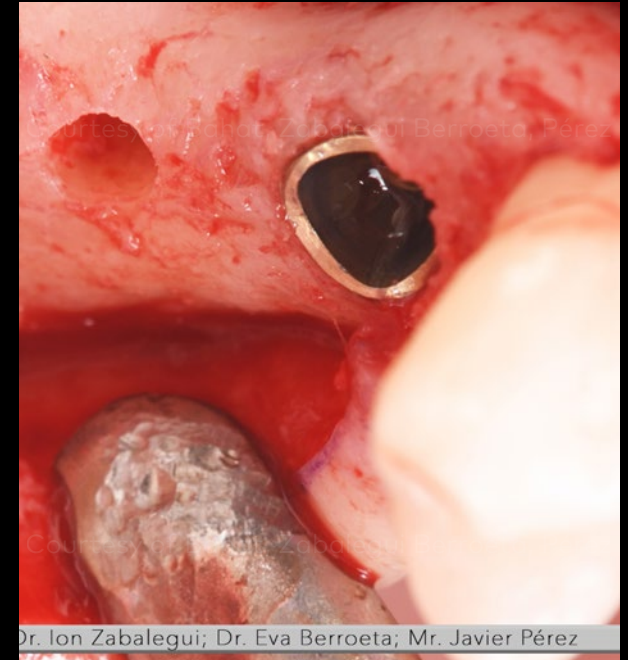
## Outcome



Osseoshaper™ instrument\* preparation of the site at 50rpm without irrigation



Implant followed the direction created by the OsseoDirector™ and OsseoShaper™ instruments\*



Flat side of the trioval implant facing buccal

## Shape (position 15)

## Place (position 15)

\* In this clinical case the pre-launch version of the OsseoShaper™ instrument has been used: the "CS Soft Bone Gizmo". Black markings on the shaft and a 0.5 mm longer tip on the instrument are introduced on the final design of the OsseoShaper™ instrument.

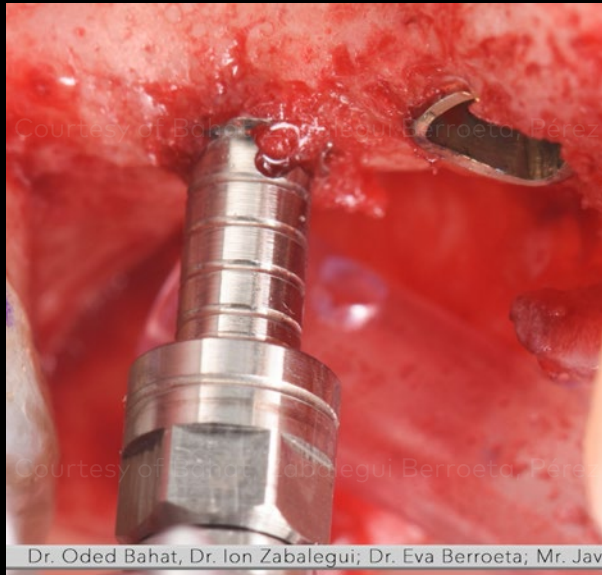


## Initial clinical situation

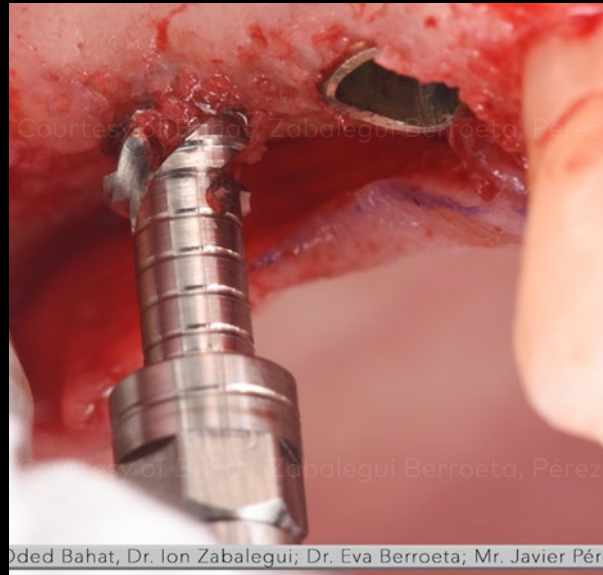
## Treatment planning

## Surgical procedure

## Outcome



OsseoShaper™ instrument\* at full depth. The end of the threads indicates the position of the implant shoulder relative to the bone crest.



Reversing to remove the instrument



Autogenous bone is maintained within the osteotomy and within the threads of the instrument

## Shape (position 16)

\* In this clinical case the pre-launch version of the OsseoShaper™ instrument has been used: the "CS Soft Bone Gizmo". Black markings on the shaft and a 0.5 mm longer tip on the instrument are introduced on the final design of the OsseoShaper™ instrument.

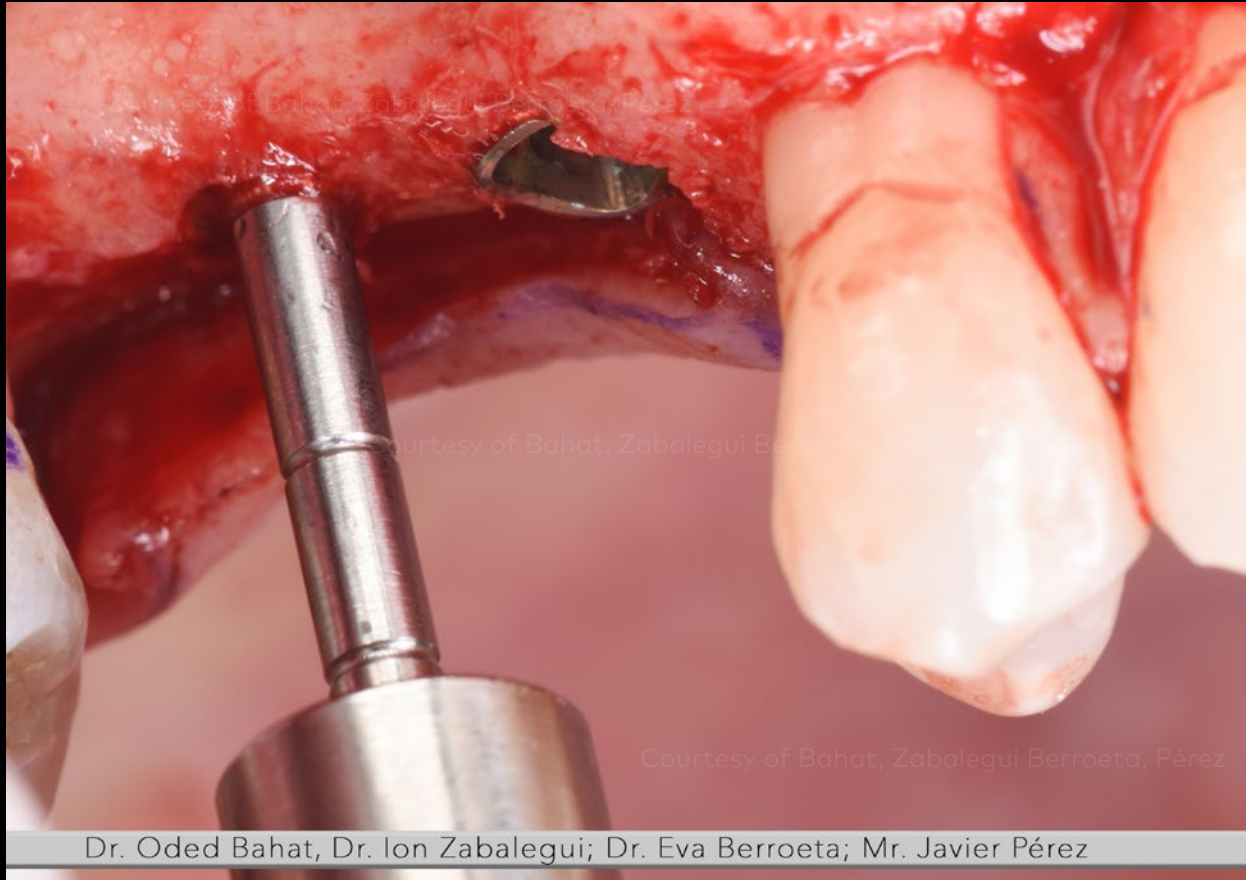


**Initial clinical  
situation**

**Treatment  
planning**

**Surgical  
procedure**

**Outcome**



Sinus lift with osteotomes after site preparation

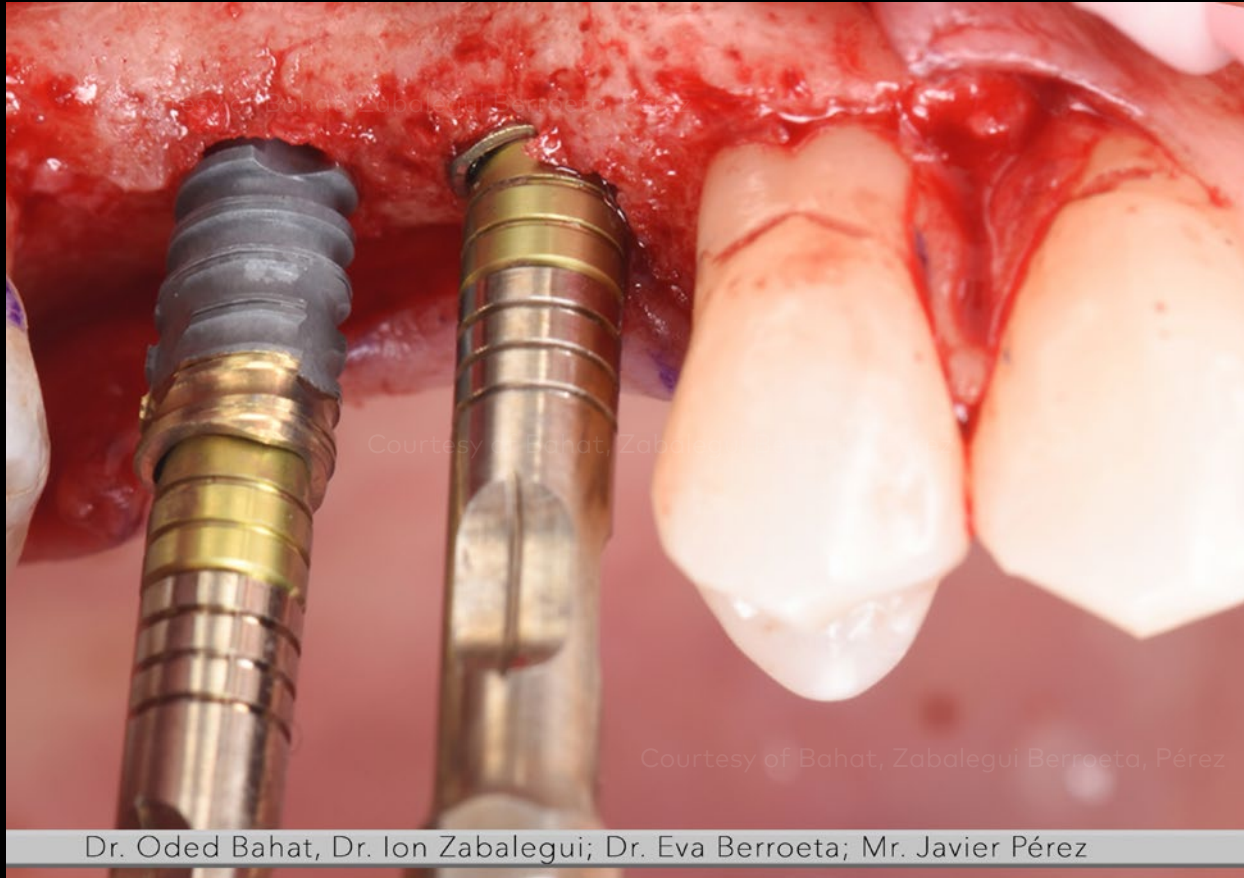
**Place**

**Initial clinical  
situation**

**Treatment  
planning**

**Surgical  
procedure**

**Outcome**



Implant insertion 70 Ncm

**Place**

Final placement of the implants

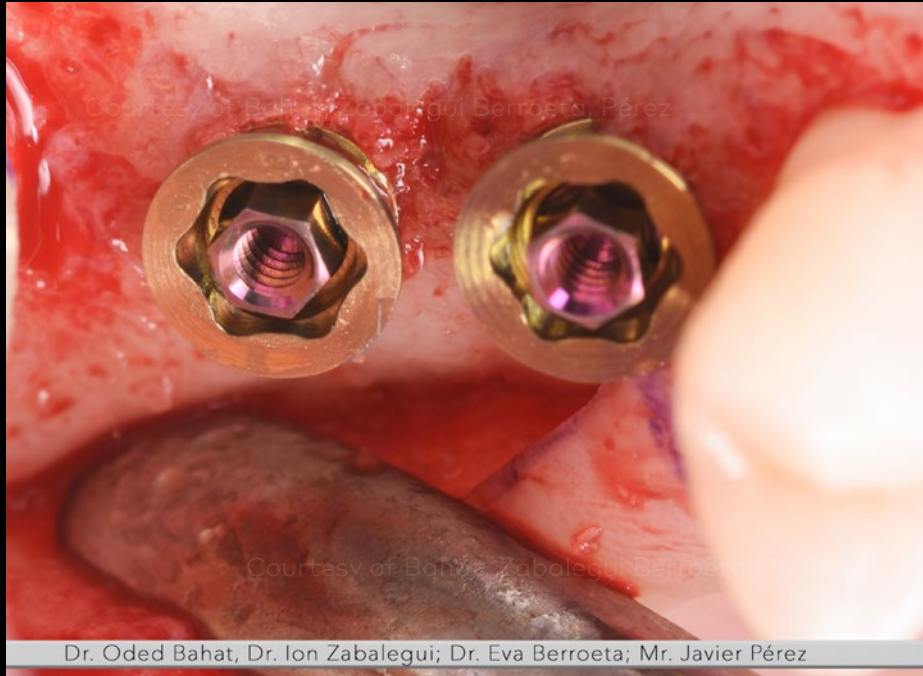
Flat part on the implant driver and vertical corresponding groove within the mount corresponds to the trioval flat aspect facing the facial aspect

## Initial clinical situation

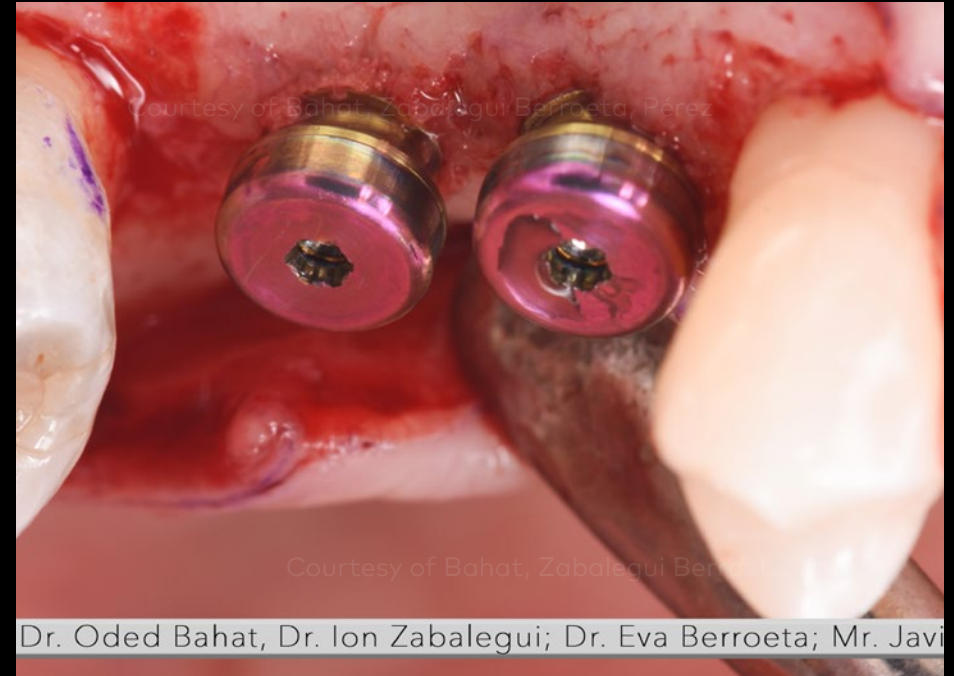
## Treatment planning

## Surgical procedure

## Outcome



Transmucosal base placed at time of surgery



Healing caps and the base function as healing abutments

## Place

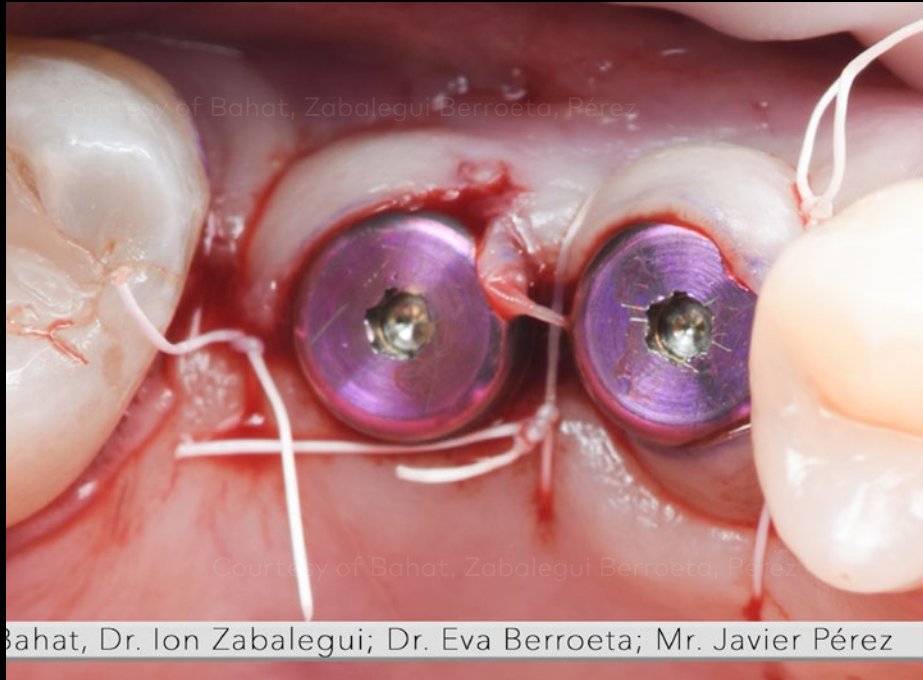


## Initial clinical situation

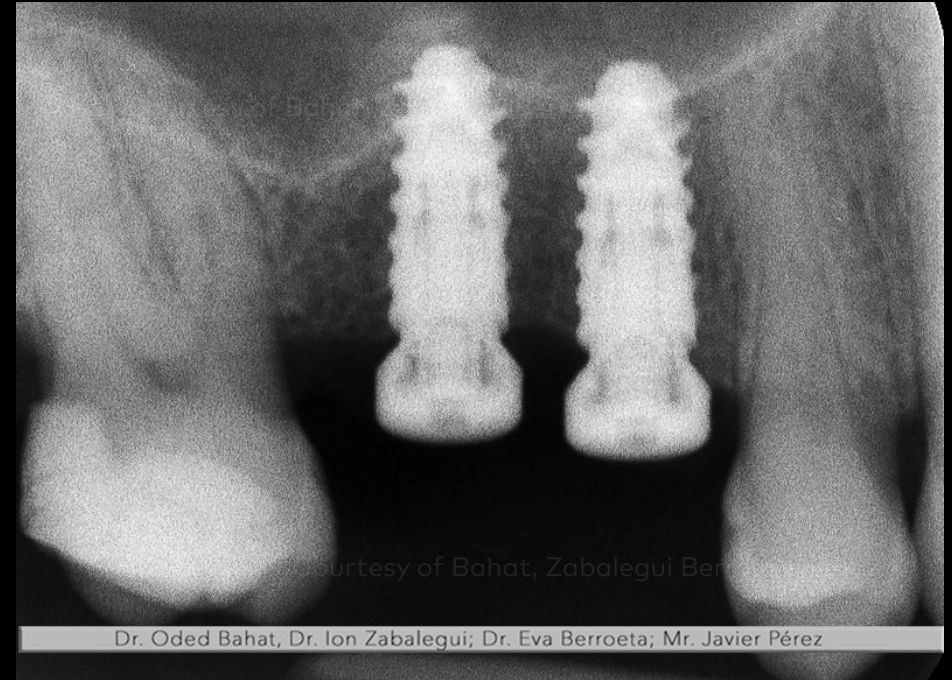
## Treatment planning

## Surgical procedure

## Outcome



Flap closure. Healing caps and the base jointly shape mucosa.



Radiographs immediately post-op

## Place



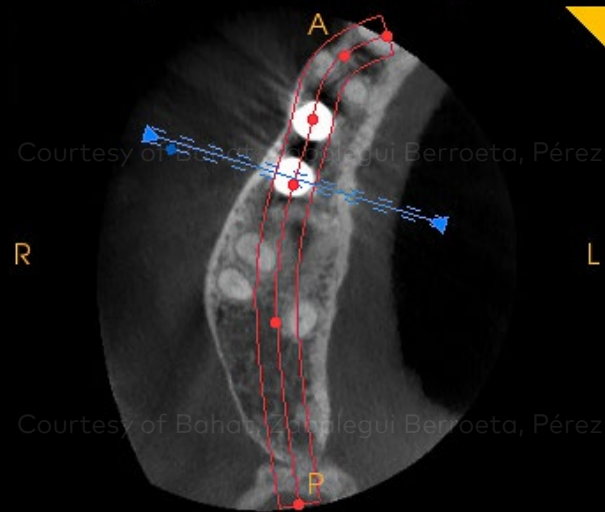
## Initial clinical situation

## Treatment planning

## Surgical procedure

## Outcome

Modo de integración: AVG. Grosor de corte: 1,1 mm.



Modo de integración: AVG. Grosor de corte: 4,0 mm.



CBCT immediately post op illustrating the implants position and sinus floor

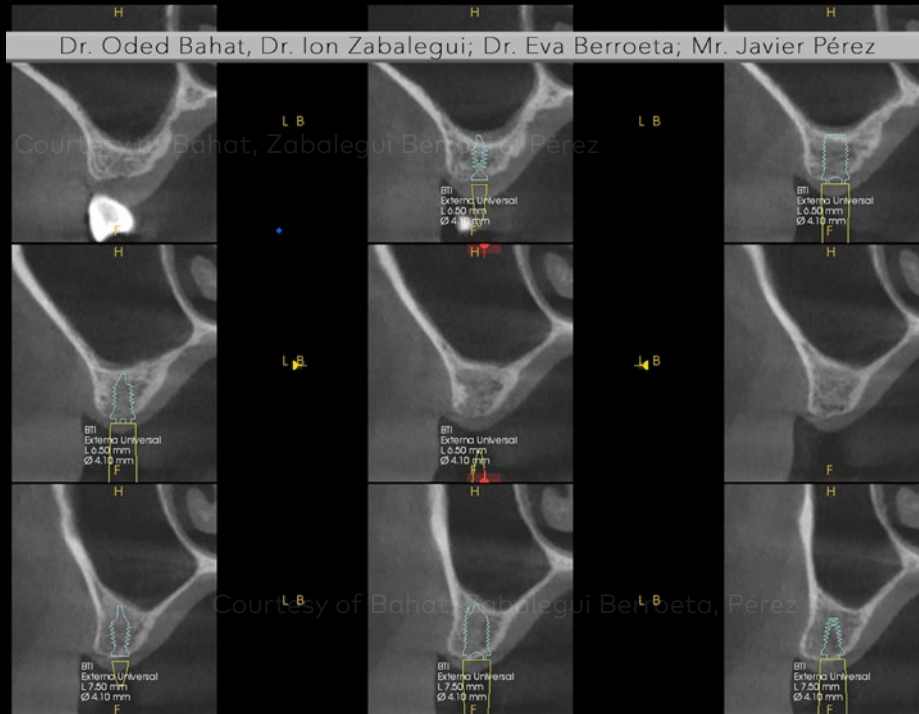
## Immediate post-op CBCT

## Initial clinical situation

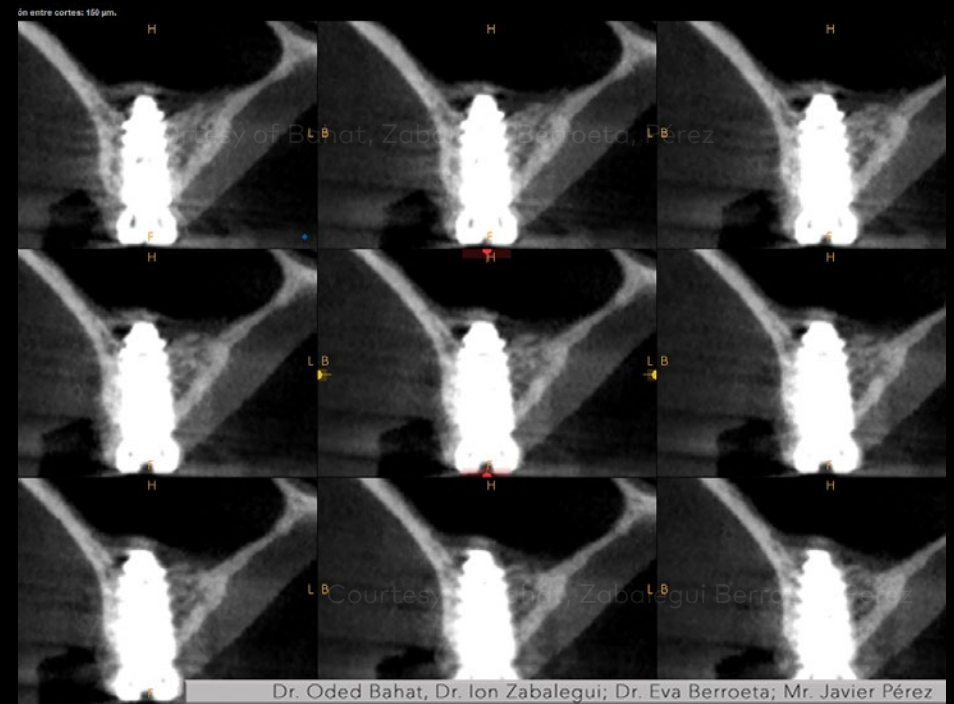
## Treatment planning

## Surgical procedure

## Outcome



CBCT Pre-op (position 16) illustrating inadequate vertical bone height



CBCT Post-op (position 16) illustrating implant placement and sinus elevation

## Pre-op and post-op CBCT

**Initial clinical  
situation**

**Treatment  
planning**

**Surgical  
procedure**

**Outcome**



12 month post-op. Final restoration

**Final restoration**

**Patient treatment courtesy of Dr. Oded Bahat, Dr. Ion Zabalegui,  
Dr. Eva Berroeta & Mr. Javier Pérez**

