

CLINICAL CASE



# Immediate placement and function with the Nobel Biocare N1™ implant system

Dr. Alfonso Caballero de Rodas  
Spain





**Alfonso Caballero  
de Rodas**

**Patient**

46 years old, female, no significant diseases

**Clinical situation**

Broken tooth #15. The fracture is subcrestal, and the tooth cannot be restored

**Surgical solution**

Tooth extraction and immediate implant placement with immediate loading

**Restorative solution**

Screw-retained temporary acrylic crown, directly connected to the implant

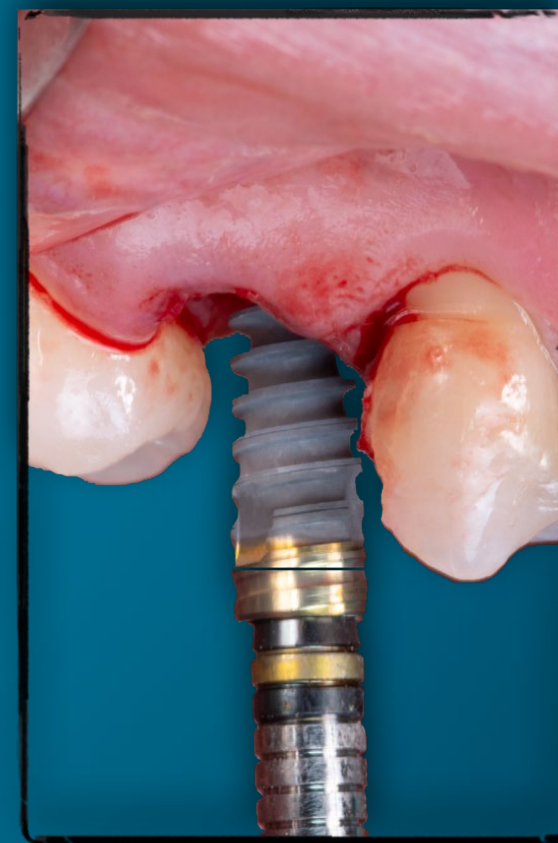
**Surgery date**

October 5th, 2020

**Tooth position**

#15

Nobel Biocare N1™ Implant with immediate placement in a fresh extraction socket. Atraumatic tooth extraction with immediate implant in a palatal position, then immediate loading using a temporary abutment screwed to the implant.



**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Situation before the surgery with a visible fracture of tooth #15

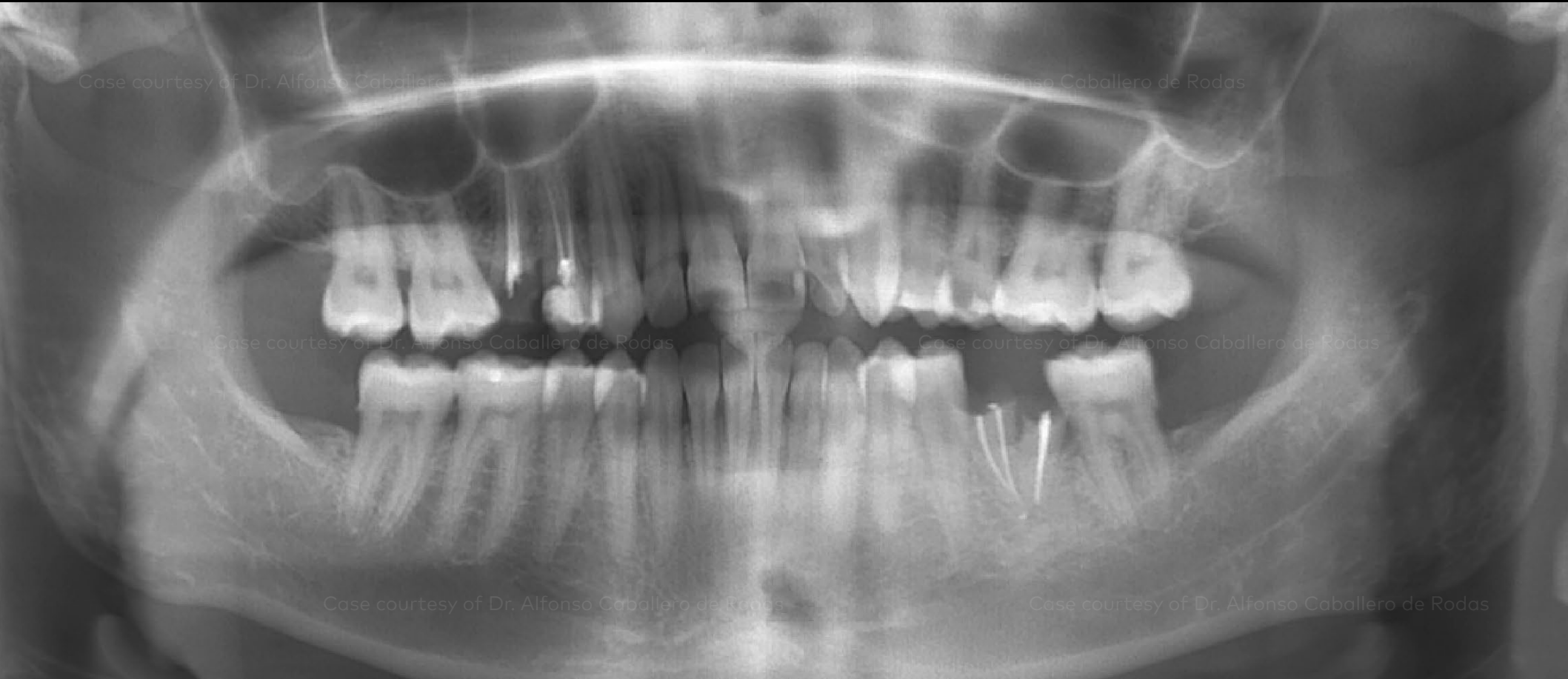
**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Radiographic image at presentation showing crown fracture on tooth #15

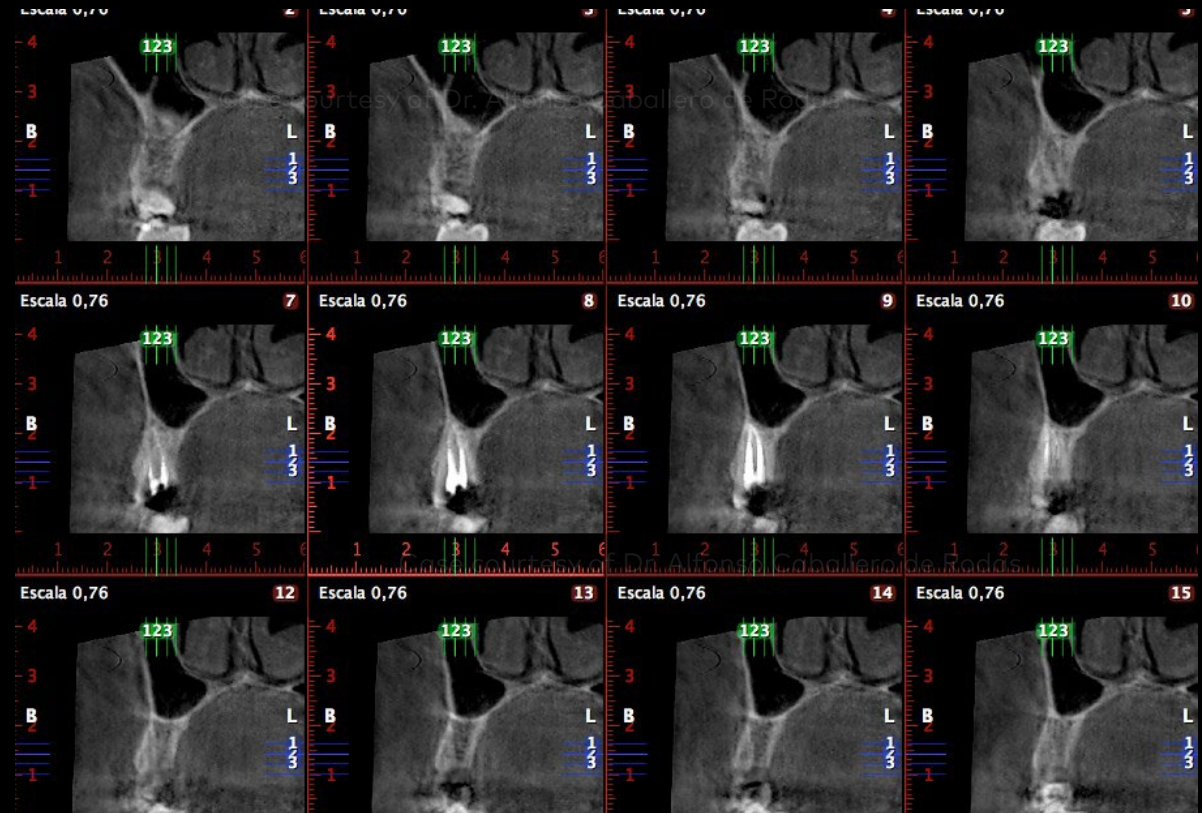
# Initial clinical situation

# Treatment planning

# Surgical procedure

# Restorative procedure

# Outcome



CBCT maxilla. Good bone foundation in 3 dimensions. No infections

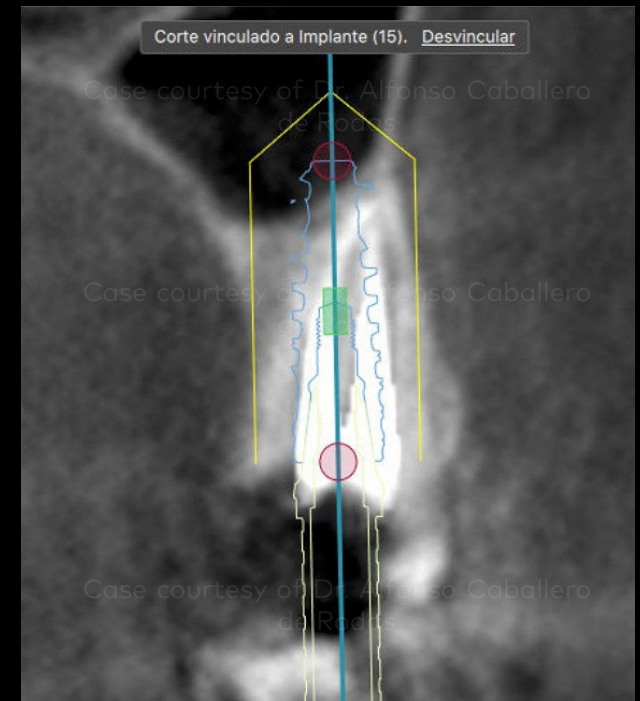
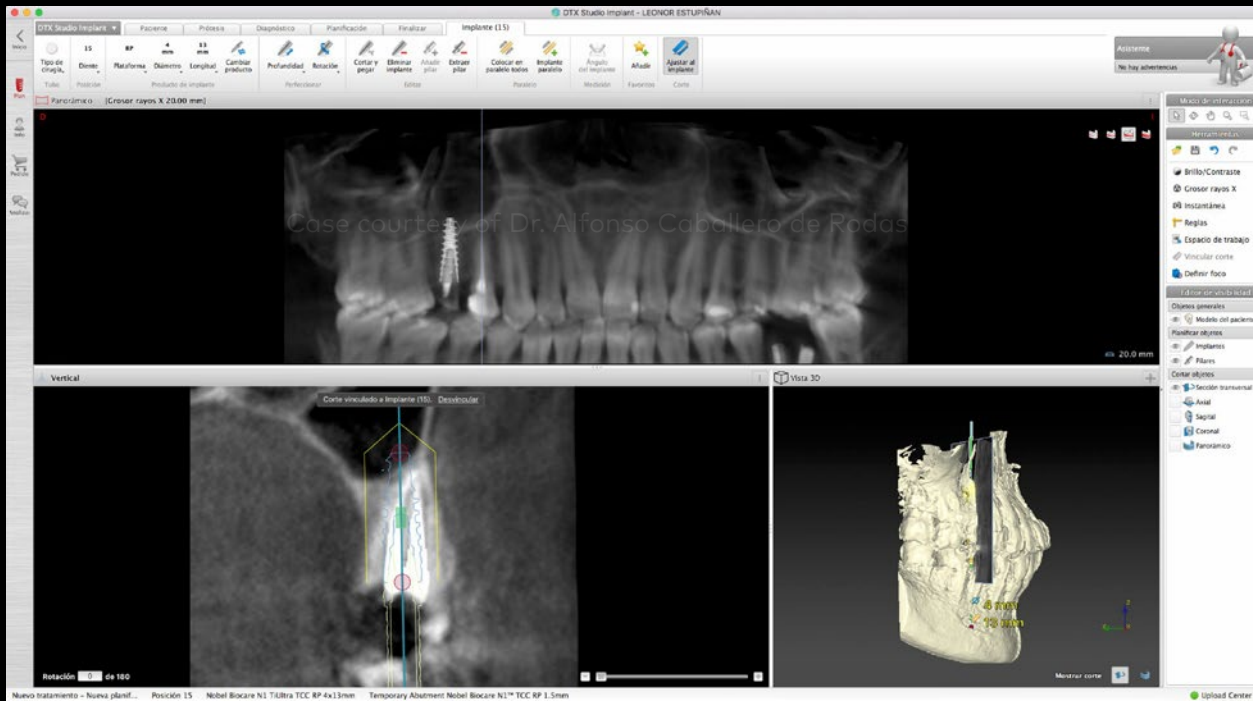
# Initial clinical situation

# Treatment planning

# Surgical procedure

# Restorative procedure

# Outcome



Digital treatment planning in DTX Studio™ Implant – 13 mm implant and temporary abutment

### Posición de diente 15

#### Implante

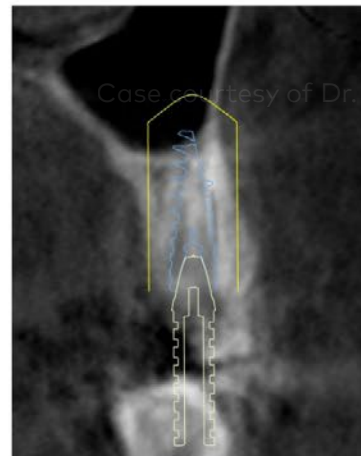
	Fabricante	Nobel Biocare®
	Nombre de producto	N1 TiUltra TCC
	Platform	RP
	Tamaño	ø 4 x 13 mm
	REF	300863

#### Cirugía

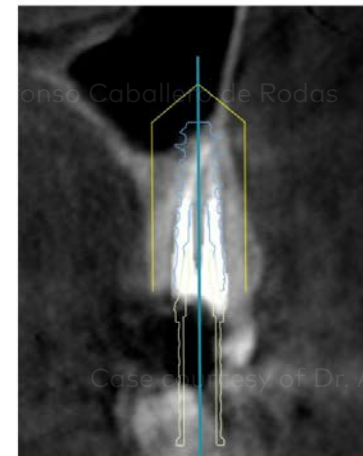
Tipo de cirugía	Freehand
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#### Pilar

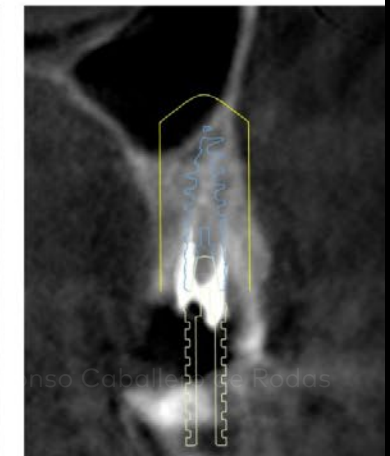
Pilar	Temporary Abutment Nobel Biocare N1™ TCC RP 1.5mm
REF	300936



Desplazamiento -1 mm



Desplazamiento 0 mm



Desplazamiento +1 mm

#### Productos de implante

Pos.	Nombre de producto	Plataforma	Tamaño	Tipo de cirugía
15	N1 TiUltra TCC	RP	ø 4 x 13 mm	Freehand

#### Productos del pilar

Pos.	Nombre de producto
15	Temporary Abutment Nobel Biocare N1™ TCC RP 1.5mm

DTX Studio™ Implant report:

- Nobel Biocare N1™ TiUltra™ TCC RP 4 x 13 mm
- Temporary Abutment Nobel Biocare N1™ TCC RP 1.5 mm

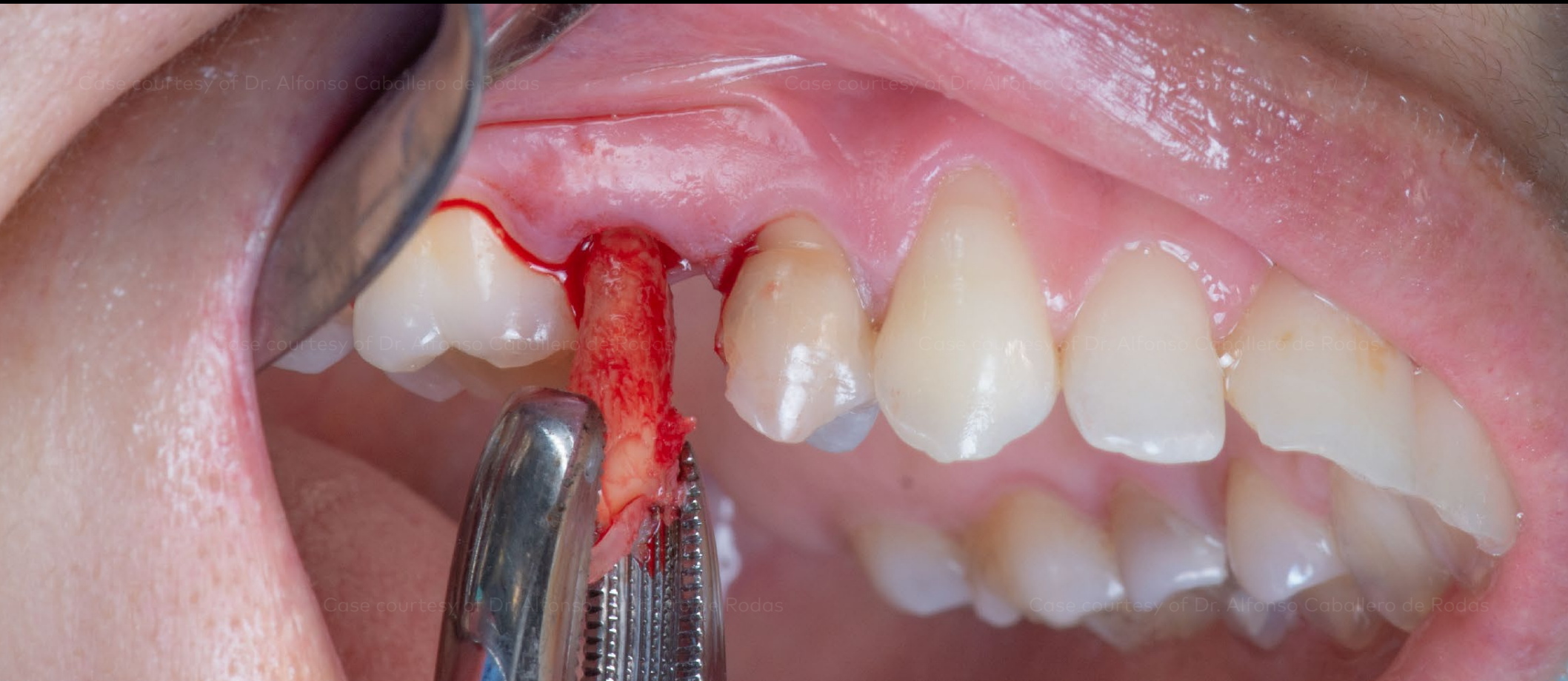
Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Atraumatic tooth extraction



**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Verification of the extraction socket depth – confirmed 15 mm, sufficient to place the 13 mm implant

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



First step in site preparation: The OsseoDirector™ instrument defines final implant position

Initial clinical situation

Treatment planning

Surgical procedure

Restorative procedure

Outcome



Second step: The OsseoShaper™ instrument operates at low speed 50 rpm and without irrigation. It creates a specific osteotomy for the co-packed Nobel Biocare N1™ Implant

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



View of the OsseoShaper™ instrument freshly removed from the site

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Nobel Biocare N1™ Implant featuring the TiUltra™ surface

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Nobel Biocare N1™ Implant placement



Nobel Biocare N1™ Implant insertion

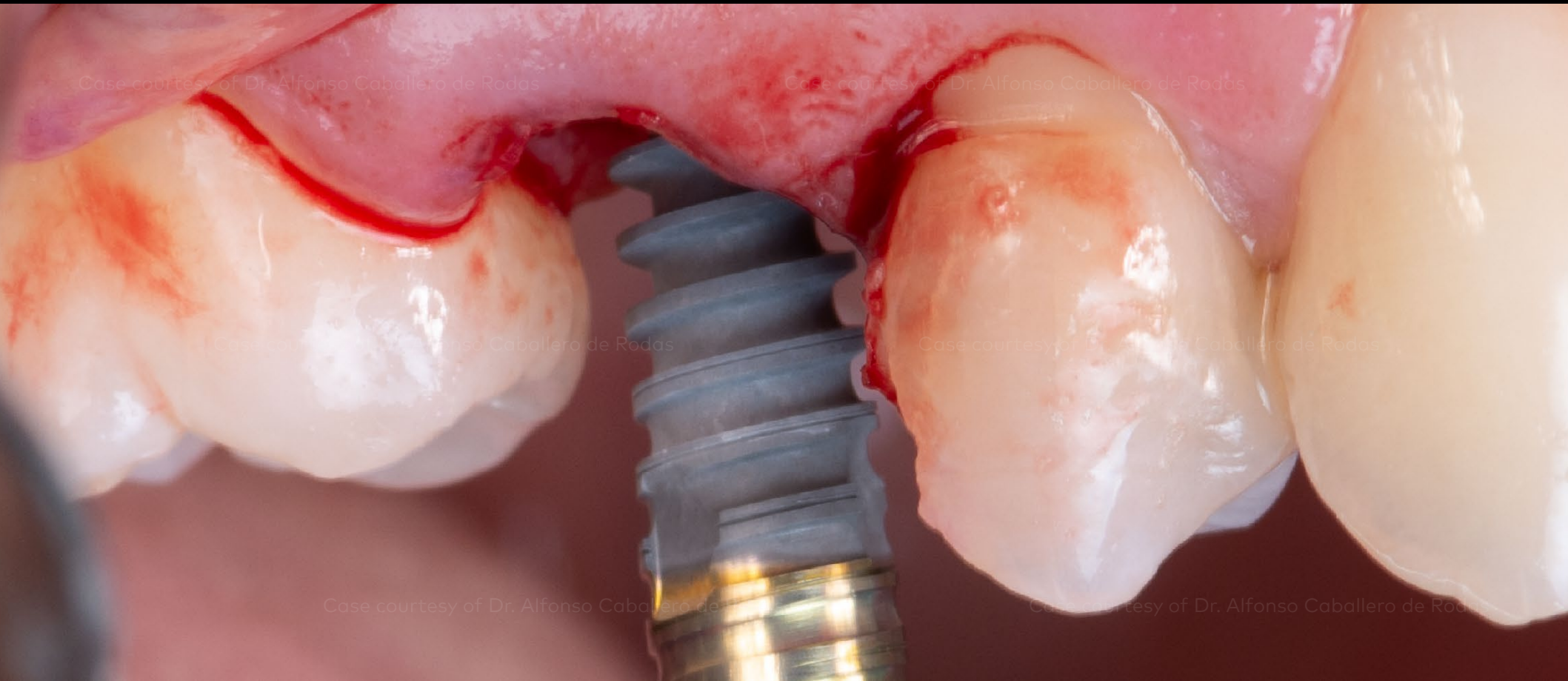
**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



The Nobel Biocare N1™ Implant being placed in a fresh extraction socket

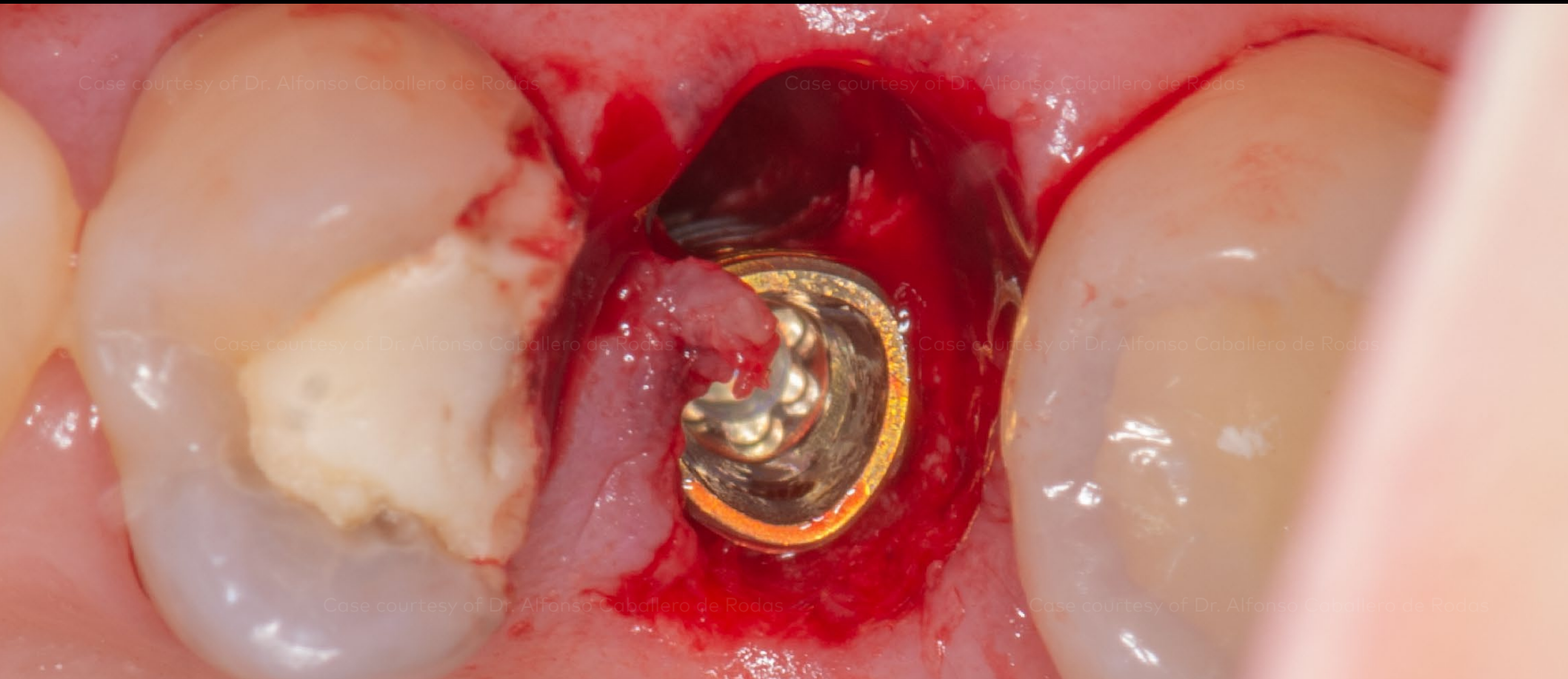
**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Occlusal view of the final implant position – flat side of the trioval conical connection (TCC) oriented towards buccal



**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Temporary Abutment TCC 1.5 mm connected directly to the implant



Temporary Abutment post reduced to the required height

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Provisional restoration in place after occlusal clearance check

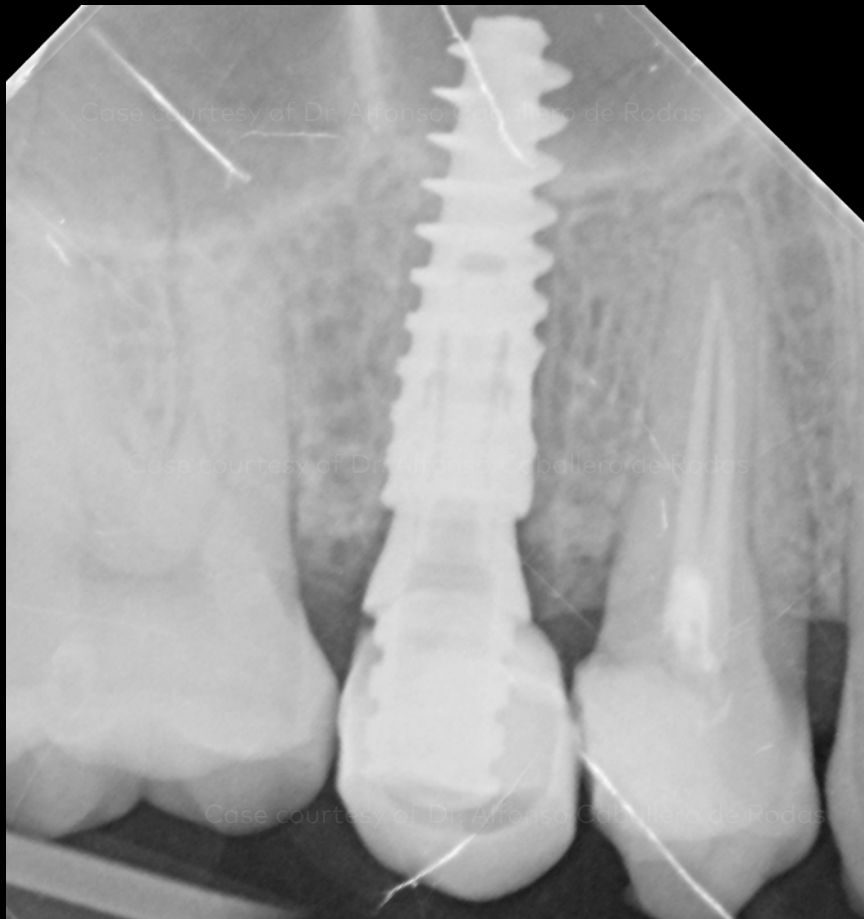
**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



X-ray of the implant with the provisional restoration at the day of surgery



Provisional restoration at the day of surgery

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Lateral view 2 weeks post surgery. Tissue margin is stable

**Initial clinical situation**

**Treatment planning**

**Surgical procedure**

**Restorative procedure**

**Outcome**



Tissue healing. We can see how transeptal fibers are healed and stable

## Case courtesy of Dr. Alfonso Caballero de Rodas

