

Socket preservation

Using creos xenogain collagen bone block,
creos xenogain and creos magnesium pins

Dr. Liliana Silva





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Patient

17- years-old male (under growing curve),
ASA I; nonsmoker; no excessive alcohol consumption; no uncontrolled systemic conditions.

Clinical situation

Failing root canal in the anterior zone. Tooth position #22.

Surgical solution

Atraumatic tooth extraction and socket preservation using autogenous bone from the tuberosity and creos xenogain collagen bone block.
No simultaneous implant placement as patient is still in active growing.

Product used

creos xenogain collagen block, creos xenogain collagen membrane, creos magnesium pins

Tooth position

22

Initial clinical situation

Treatment planning

Surgical procedure

Outcome

Follow up

Clinical view



Case courtesy of Dr. Liliana Silva

Initial clinical situation before tooth extraction. Failing root canal in position #22.



Case courtesy of Dr. Liliana Silva

Initial clinical situation before tooth extraction. Failing tooth in position #22. Occlusal view.



Initial clinical
situation

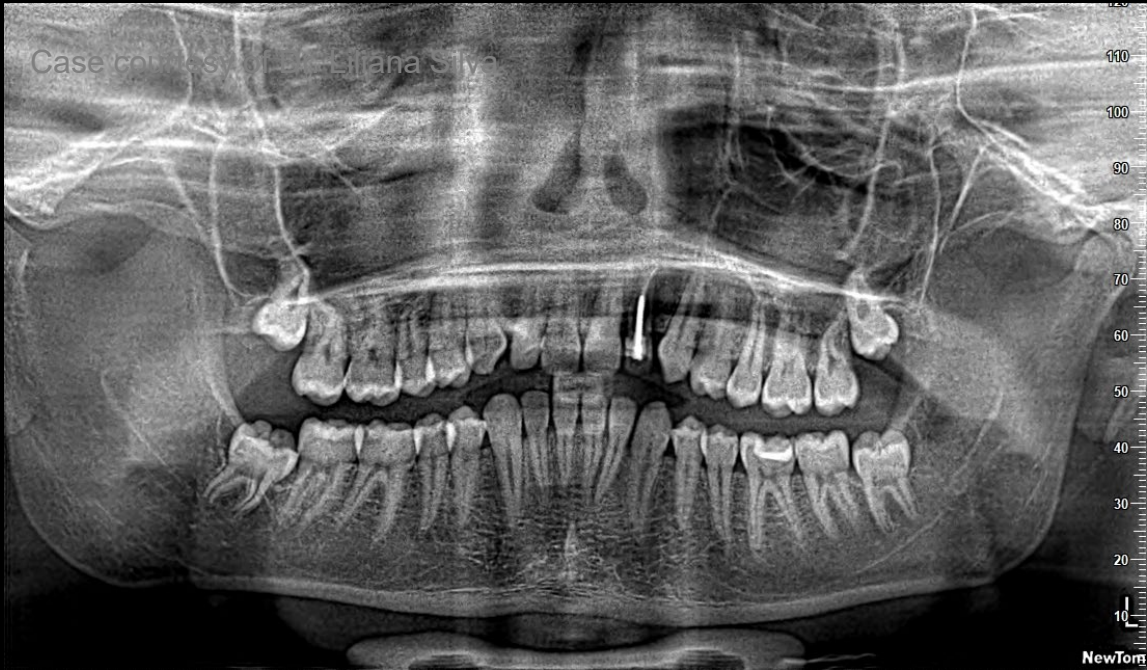
Treatment
planning

Surgical
procedure

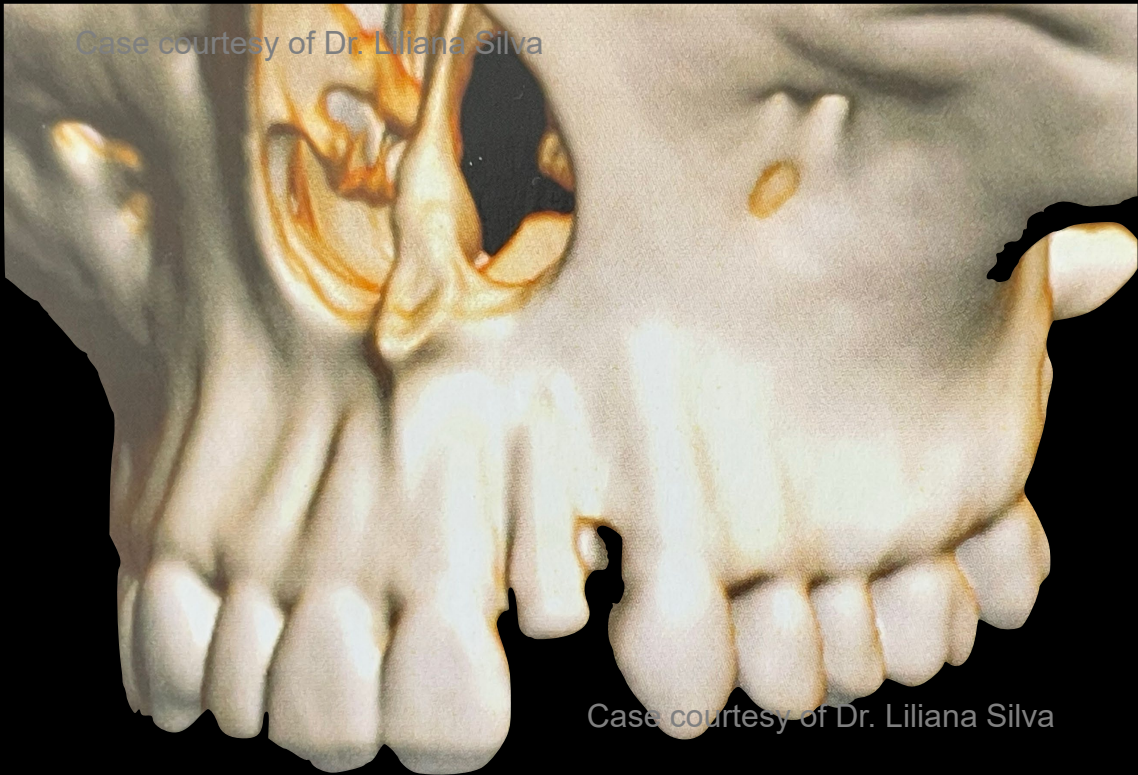
Outcome

Follow up

Radiographic view



Case courtesy of Dr. Liliana Silva



CBCT scan showing easy dehiscence and fenestration.

CBCT scan of initial clinical situation. Failing root canal in tooth position 22 in underaged patient.

**Initial clinical
situation**

**Treatment
planning**

**Surgical
procedure**

Outcome

Follow up

Atraumatic extraction



Opening of a full thickness flap showing bone dehiscence and fenestration.



Atraumatic tooth extraction.



Initial clinical
situation

Treatment
planning

Surgical
procedure

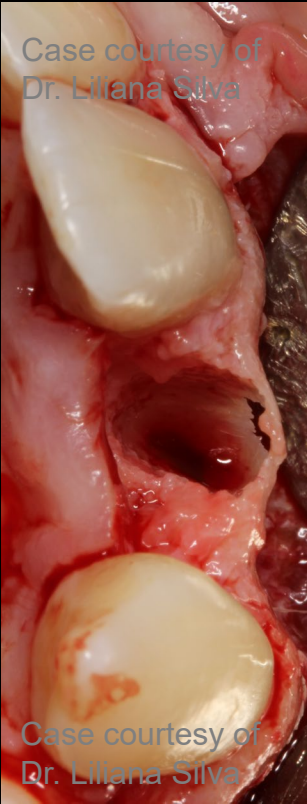
Outcome

Follow up

Atraumatic extraction



Clinical view after tooth extraction. Bone dehiscence and fenestration.



Occlusal view after tooth extraction. Preservation of bone architecture.



Initial clinical
situation

Treatment
planning

Surgical
procedure

Outcome

Follow up

Collection of autogenous bone



Extraction of the third right molar.

Case courtesy of
Dr. Liliana Silva



Collection of the autogenous bone from tuberosity using a calibrated chisel.

Case courtesy of
Dr. Liliana Silva



Initial clinical
situation

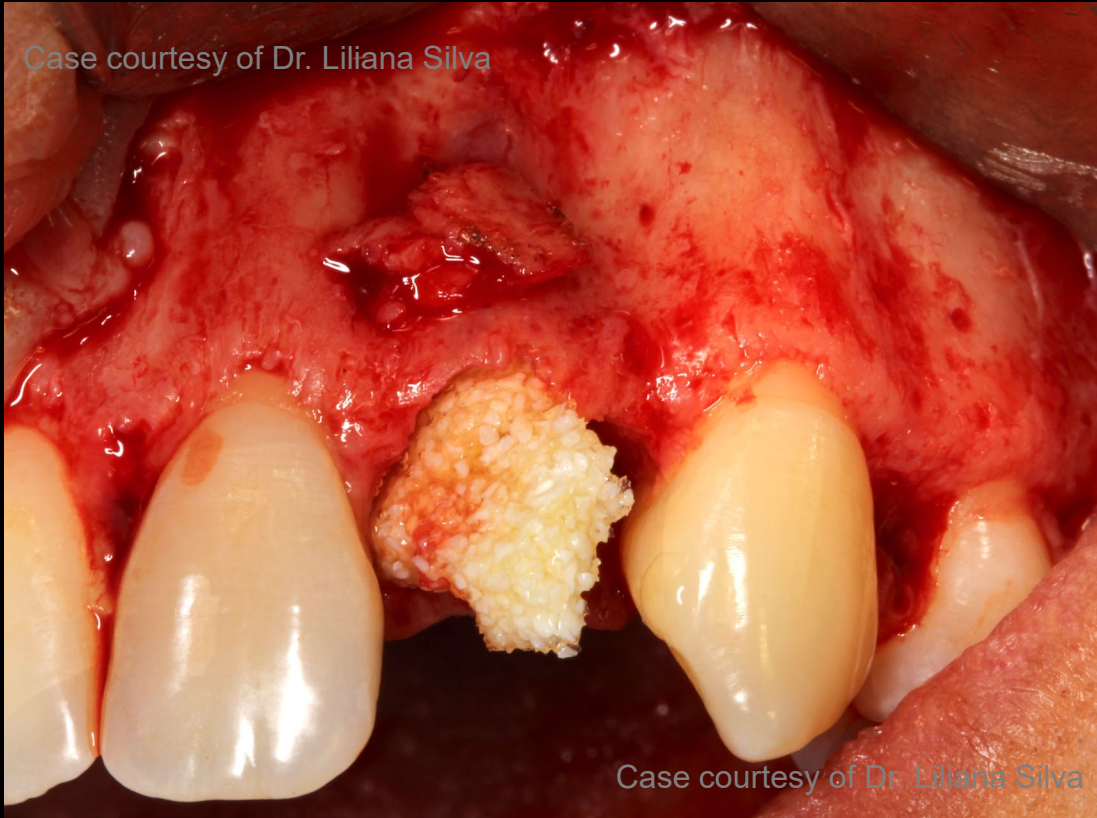
Treatment
planning

Surgical
procedure

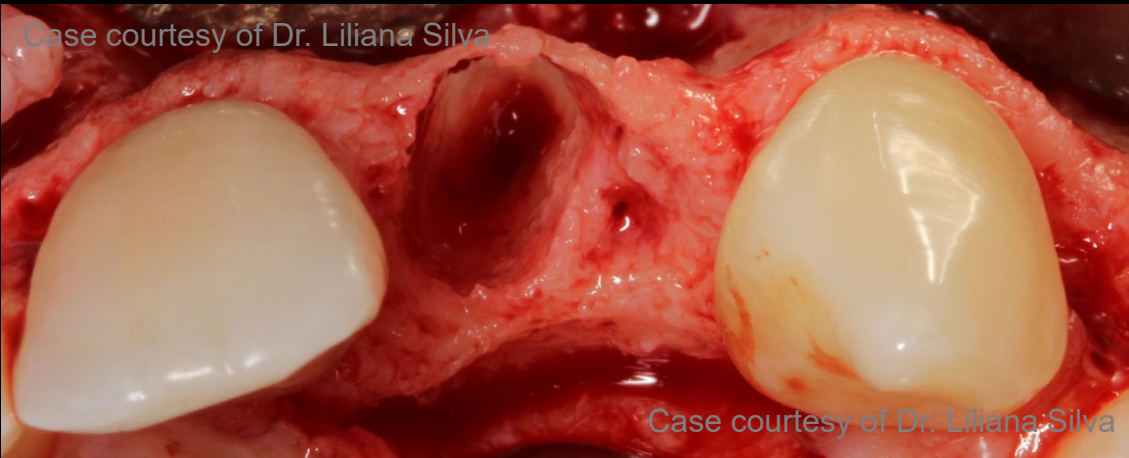
Outcome

Follow up

Socket preservation



Socket preservation using creos xenogain collagen bone block. Autogenous bone from tuberosity us used to close fenestration.



Clinical picture before and after socket preservation.

Initial clinical
situation

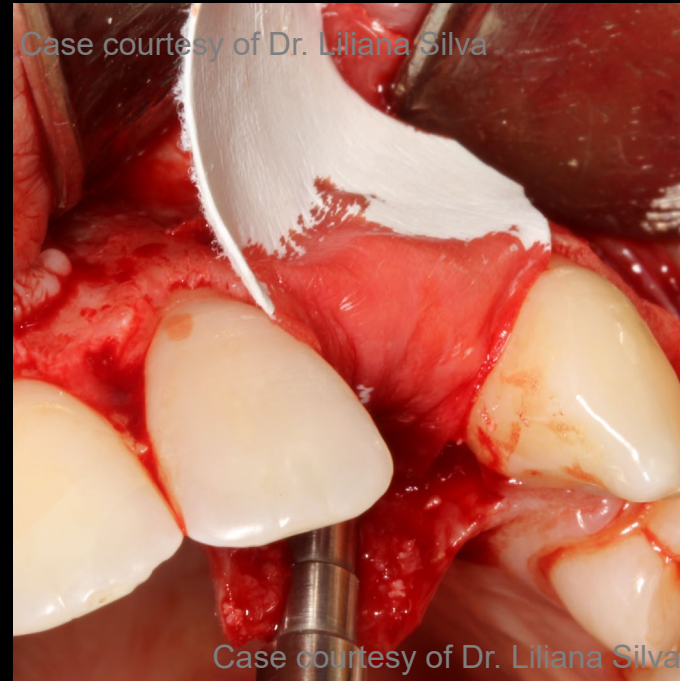
Treatment
planning

Surgical
procedure

Outcome

Follow up

Socket preservation



Fixation of a creos xenoprotect collagen membrane using a prototype of the creos magnesium pins on palatal side. After breakage of the pin the membrane was fixated using an absorbable 6-0 suture. The pins have since been made sharper.

Buccal fixation of the membrane using magnesium pins.

Initial clinical
situation

Treatment
planning

Surgical
procedure

Outcome

Follow up

Socket preservation



Usage of the Cheeseburger Technique, consisting of layering bone graft material and collagen membranes to create an optimal environment for bone regeneration. Base layer bone graft, middle layer collagen membrane and top layer bone graft and collagen membrane fixed with creos magnesium pins. Connective tissue graft is placed on top to simultaneously augment soft tissue thickness.



Initial clinical
situation

Treatment
planning

Surgical
procedure

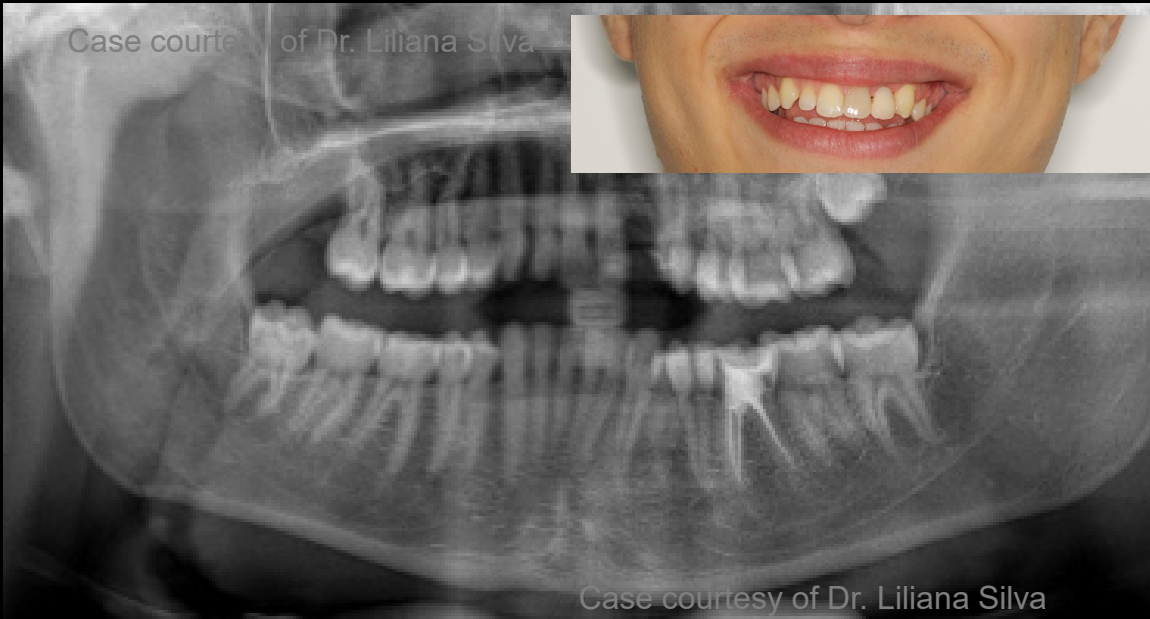
Outcome

Follow up

Clinical outcome



Soft tissue after one month healing



Panoramic X-ray after 1 month healing.

Initial clinical
situation

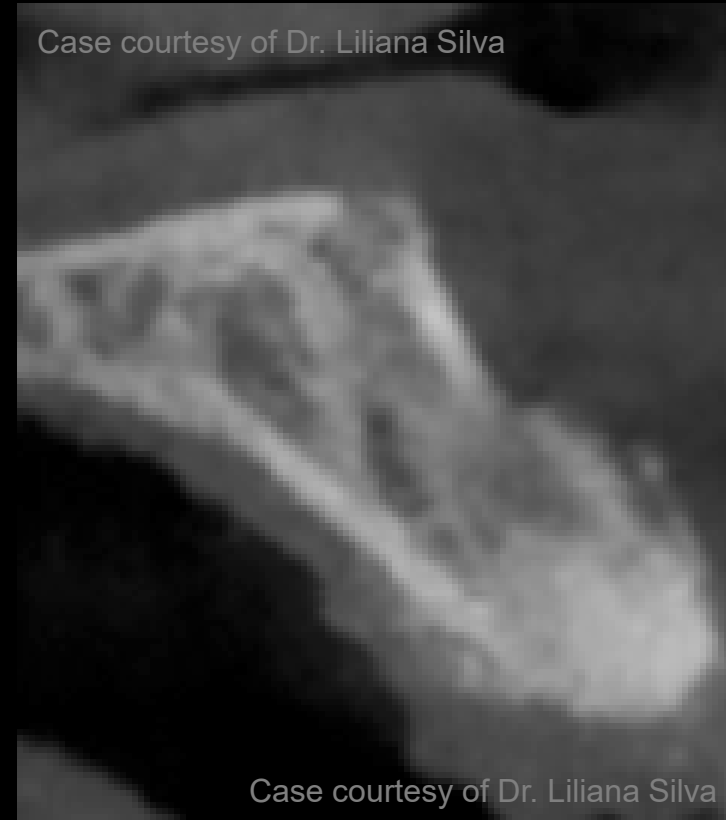
Treatment
planning

Surgical
procedure

Outcome

Follow up

CBCT scan of the creos magnesium pins



CBCT scan after 1 month healing.
The radio lucid area around the pin on the CBCT scan is due to hydrogen release during the absorption of the pin.
It has no functional impact, fades over time and does not influence the healing.

CBCT scan after 6 month healing.

Case courtesy of Dr. Liliana Silva



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