



# SOFT TISSUE CONTOUR CHANGES AFTER THE SOCKET SHIELD TECHNIQUE



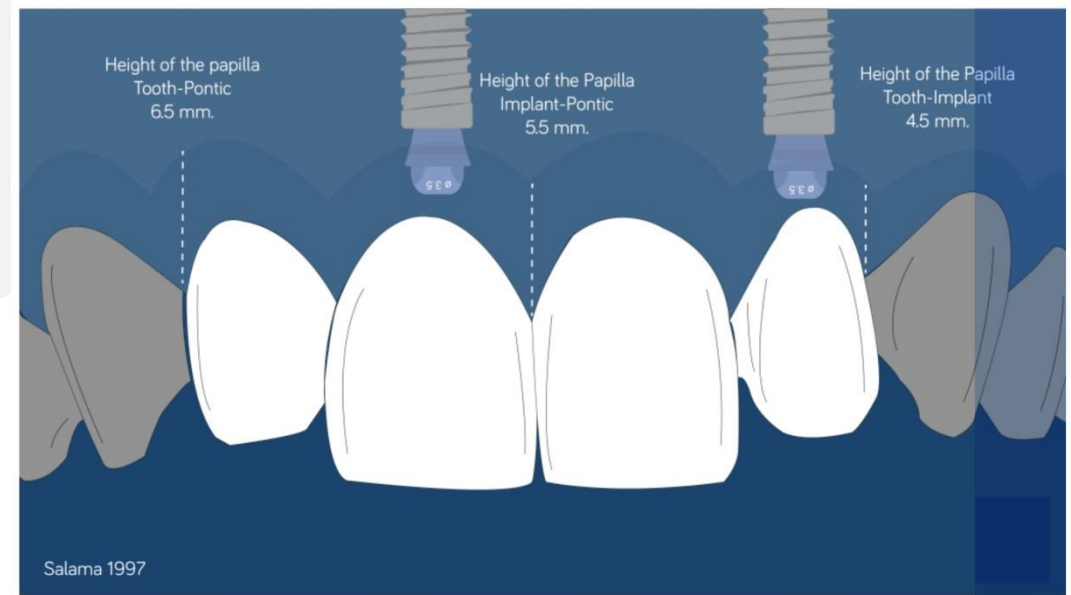
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BRIDGING INNOVATION AND PERFECTION

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RESTORATIVE ENVIRONMENT	PROXIMITY LIMITATIONS (MM)	VERTICAL SOFT TISSUE LIMITATIONS (MM)
Tooth-tooth	1	5
Tooth-pontic	N/A	6.5
Pontic-pontic	N/A	6.0
Tooth-Implant	1.5	4.5
Implant-pontic	N/A	5.5
Implant-implant	3	3.5



**The rationale was clear:** If you maintain the tooth or the root, the periodontal ligament is also maintained, and all the events that take place after an extractions do not have to happen (Cardaropoli 2003, Araujo & Lindhe 2005).

> Clin Oral Implants Res. 2006 Dec;17(6):606-14. doi: 10.1111/j.1600-0501.2006.01315.x.

## Modeling of the buccal and lingual bone walls of fresh extraction sites following implant installation

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Affiliations + expand

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### Abstract

**Objective:** To determine whether the reduction of the alveolar ridge that occurs following tooth extraction and implant placement is influenced by the size of the hard tissue walls of the socket.

**Material and methods:** Six beagle dogs were used. The third premolar and first molar in both quadrants of the mandible were used. Mucoperiosteal flaps were elevated and the distal roots were removed. Implants were installed in the fresh extraction socket in one side of the mandible. The roots were replaced to allow a semi-submerged healing. The procedure was repeated in the opposite side of the mandible after 2 months. The animals were sacrificed 1 month after implant installation. The mandibles were dissected, and each implant site was analyzed by ground sectioning.

**Results:** Marked hard tissue resorption was observed at the buccal wall of the implant installation sites.

“Implant placement failed to preserve the hard tissue dimension of the ridge following tooth extraction. The buccal as well as the lingual bone walls were resorbed. At the buccal aspect, this resulted in some marginal loss of osseointegration.”

## Unconventional implant treatment: I. Implant placement in contact with ankylosed root fragments. A series of five case reports

Mithridade Davarpanah, Serge Szemekler-Moncler

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### Abstract

**Objective:** Implant treatment of ankylosed root fragments in contact with the implant.

“This series of cases suggests that implants placed in contact with ankylosed root fragments might not interfere with implant integration or harm occlusal function, at least in the mid-term”.

The implants have been now loaded for a period of 4 years. At the 4-year follow-up, appearance of the bone-implant interface was similar to that of the integrated implants. The remaining root fragments were in contact with the implants; no specific pathological sign could be observed. A limited resorption of dentine was found at one site after 4 years.

**Conclusion:** This series of cases suggests that implants placed in contact with ankylosed root fragments might not interfere with implant integration or harm occlusal function, at least in the mid-term. More cases are warranted before this procedure might be considered as a reliable clinical option when, at ankylosed teeth, one wishes to avoid an invasive extraction surgery.

## Table 2. Surgical steps for SST

Administration of local anesthesia



Decoronation of tooth crown using coarse-grained diamond bur



Tooth root is sectioned mesiodistally with long tapered fissure diamond bur into facial and palatal halves



Palatal root fragment is extracted using microperiosteal and microforceps preserving facial root fragment



Apex and tooth palatal wall are then curetted to clear any tissue and infected remains



Tooth root hereafter is known as socket shield



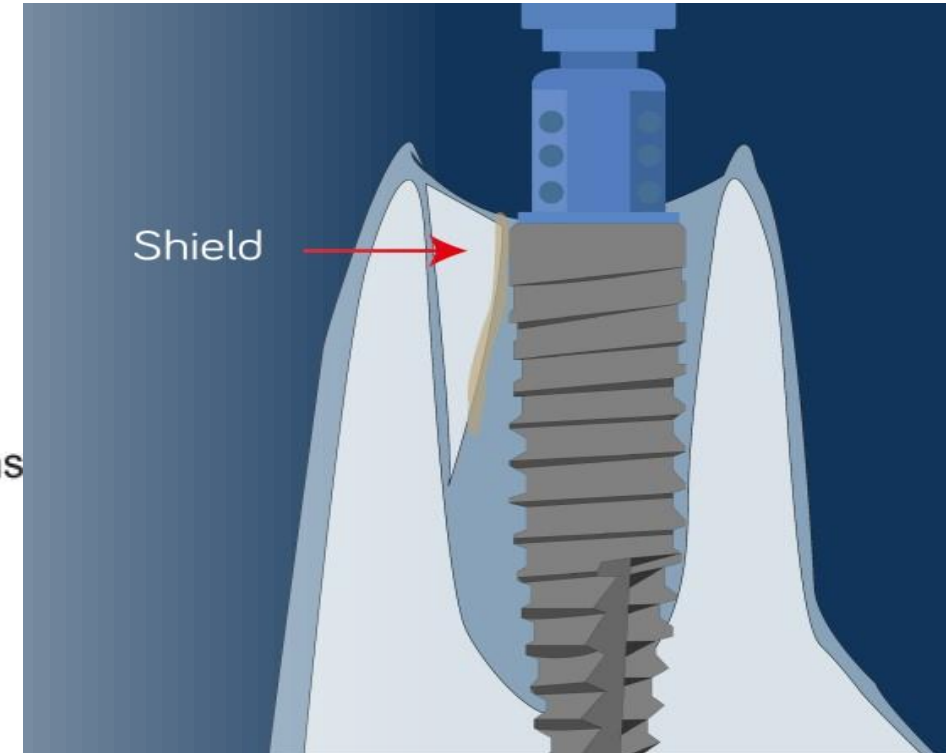
Osteotomy site is prepared and implant is inserted palatal to socket shield



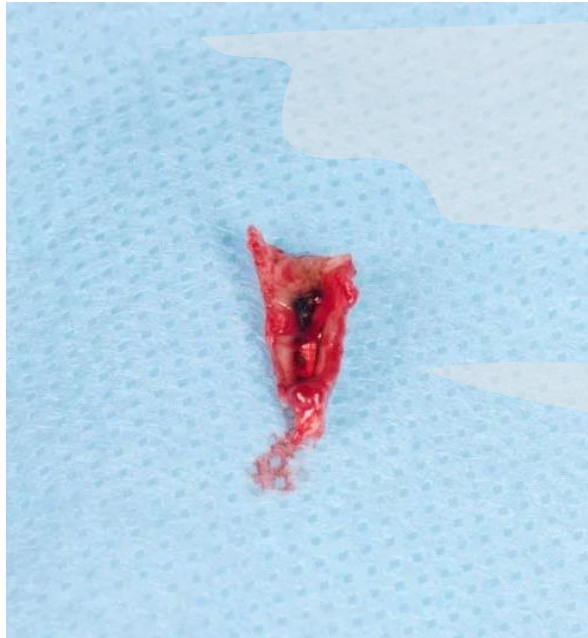
Blood clots form in the gap between the shield and implant surface



Sutures were used to seal the sockets.



# Reason for failure?



This image explains it all. Shield poorly prepared, leftovers of gutta-percha!!!

**ALWAYS REMEMBER THAT, LIKE OTHER TECHNIQUES LIKE GUIDED BONE REGENERATION OR SOFT TISSUE GRAFT, SOCKET SHIELD IS A VERY SENSITIVE TECHNIQUE ([FONSECA 2018](#)).**