



# Alveolar ridge preservation in the esthetic zone using a particulated xenograft of deproteinized bovine bone and connective tissue graft



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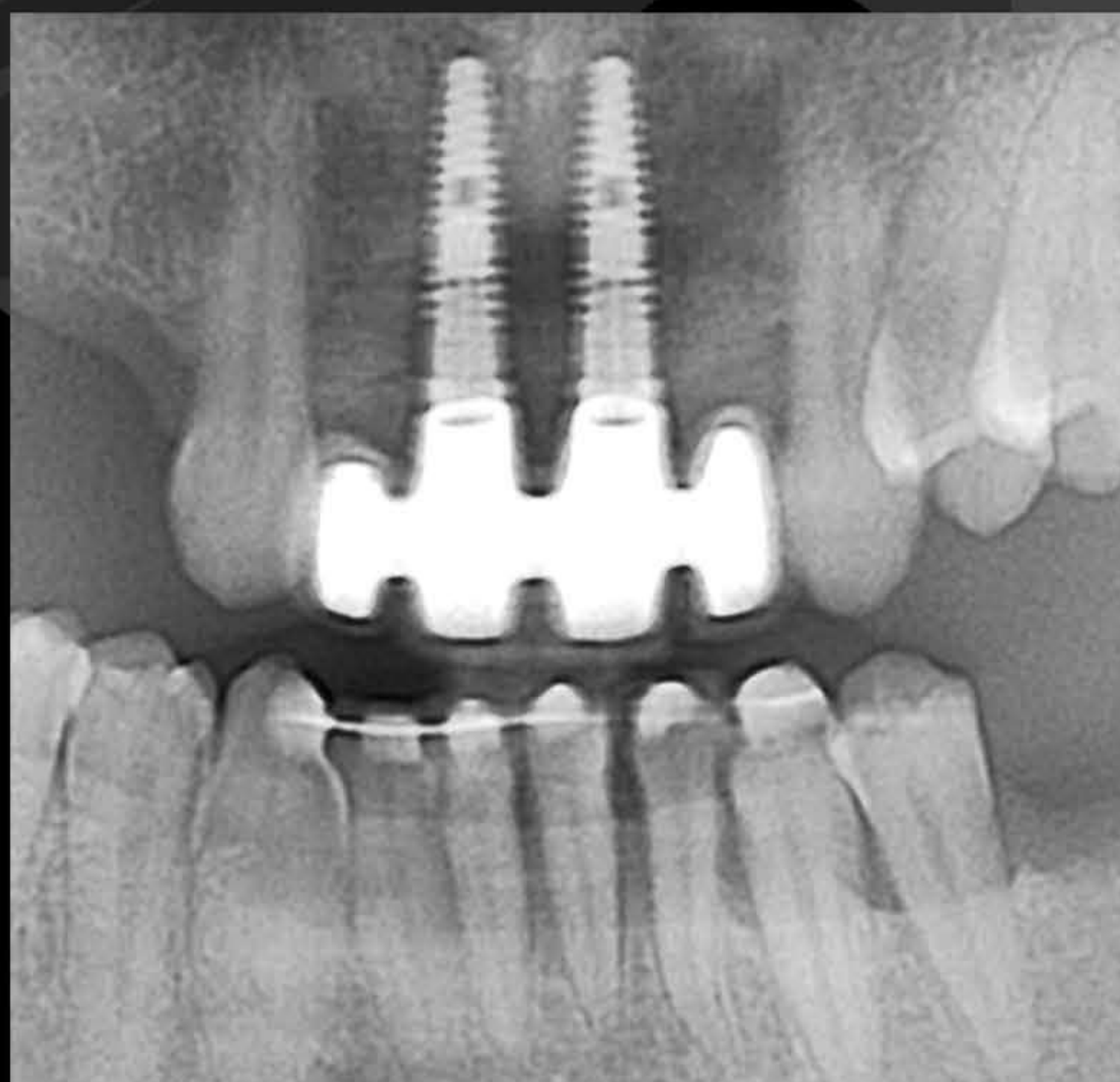
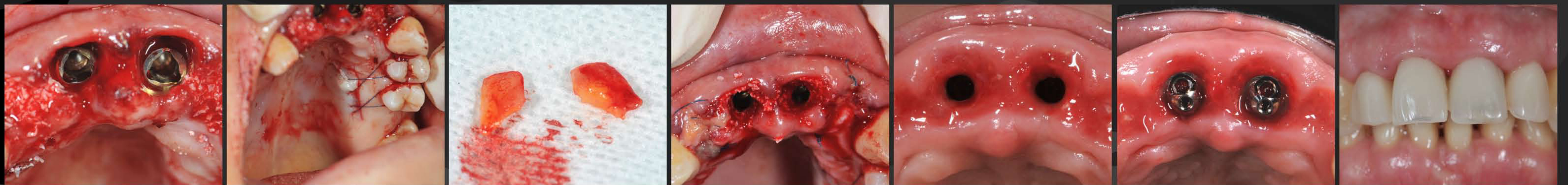
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## OBJECTIVES

Acknowledging the meaning of alveolar preservation in the esthetic zone and show the importance of filling the gap at immediate implants in terms of soft and hard tissue preservation.

## METHODS

Female patient, 40-years-old, with the upper incisors protruded and periodontally compromised. Atraumatic extraction of 4 upper incisors was performed without raising flaps to preserve the vascularization of the bony walls through the periosteum. The buccal and palatal bone plate integrity was evaluated using a probe to exclude the presence of fenestration or dehiscence. Immediate implants were placed in the sockets of 11 and 21, with preservation of the gap. The lateral incisors postextraction ridge were preserved using a particulated xenograft of deproteinized bovine bone and connective tissue graft that was harvested from the palate to keep the anatomy of esthetic zone. The immediate implants had good primary stability so we decided to make an immediate screw provisional bridge to limit buccal mucosa recession.



## RESULTS

After 4 months, was notorious the alveolar bone crest preservation in both height and width and the gingival contours are well defined. Impressions were taken and a screwed fixed prosthesis with ovoid pontics was done, achieving the aesthetic outcome of implant prosthodontic rehabilitation. After 1-year of follow-up, the gingival margin remains stable and the periapical Rx confirms the hard tissue stability without signs of bone loss around the implants.

## CONCLUSION

Tooth extractions in the aesthetic zone lead to typical bone remodeling of the alveolar crest, in both height and width, causing major changes of soft tissue contour. Many authors have proposed as a solution the ridge preservation technique, using bone grafts with or without barrier membranes. Current literature also alerts us increasingly to the dangers of immediate implants with immediate loading in the aesthetic zone. These should only be made in well selected cases, with a thick periodontum and when the alveolar buccal wall is intact, always with preservation of the gap between the walls and the implant.

