

PALATE BONE HARVESTING: PRELIMINARY EVALUATION

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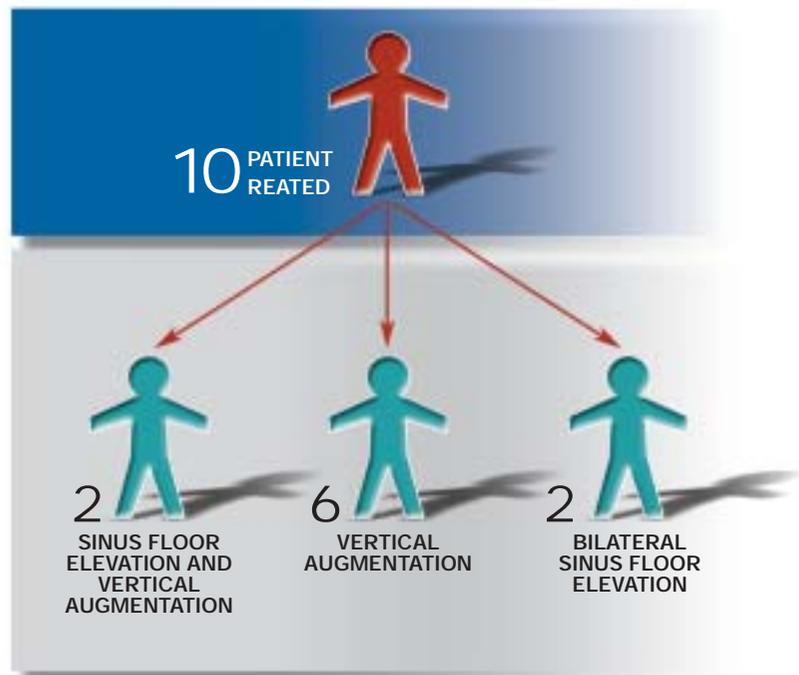
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AIM

The aim of this study is to evaluate a new technique of intraoral harvesting from a palatal area that allows to solve many maxillary atrophic problems without a second surgical donor site for bone harvesting.



Harvesting sites. For harvesting in the red-highlighted area the resection of the naso-palatal nervous vascular bundle is necessary.



MATERIALS AND METHODS

This technique consists of intrasulcular or paramarginal incisions in two teeth near the donor site in the palatal area, elevation at full thickness palatal flap, deciding the quantity of bone graft necessary and then harvesting of cortical bone chips with a minimally invasive device

(Safescraper® *curve* – Meta, Reggio Emilia- Italy). Ten patients were treated: six for vertical augmentation, 2 for bilateral sinus floor elevation and 2 for sinus floor elevation associated with vertical augmentation.

CLINICAL CASE



Young patient with traumatic defect in the anterior maxilla. Operated unsuccessfully one year before with chin harvesting



Intrasurgical evaluation of the required graft quantity



Palatal harvesting performed with bone grafting device (Safescraper® curve, META, Reggio Emilia - Italy)



Placement of support screw and positioning of titanium-reinforced membranes to cover the graft



6 months after, immediately before the second stage surgery (positioning of implants and further bone augmentation).

RESULTS

None of the patients had post-operative complications due to the bone harvesting, and more specifically there was no swelling or pain in the palatal area, paresthesia or other problem in the donor site. For each patient it was possible to solve the bone defect without having to use a second surgical donor site for harvesting.

CONCLUSION

The technique is applicable in a simple, effective and advantageous way due to the absolute absence of postoperative complications.

The palatal area has proven to be a valuable donor site, but because of accessibility, ease of harvesting and amount of bone chips, the best site remains the oblique external line of the mandible.

The palatal bone harvesting technique is suggested when the bone regeneration needs the primary flap in this area. In all cases in which it is anyway necessary to perform a secondary flap for bone harvesting, the choice of the retromolar area and oblique external line of the mandible is more convenient.