## Implant placement with split crest technique – clinical case

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## Description of the clinical case

Female patient, 41 years old, non-smoker, ASA I, whose reason for the consultation was the rehabilitation of the 3rd sextant.







In order to be able to place the implants in the ideal 3D position, because the bone crest had an average width of  $3 \pm 1$ mm observed on the CT, two implants were chosen: Nobel Replace (24-NP; 26-RP) concomitant to a technique of crest separation with simultaneous horizontal guided bone regeneration (xenograft and collagen membrane).



At 13 weeks, the second surgical phase and the 3-element metal-ceramic bridge were performed.









At three years stability of the regenerated tissues was observed.







## Discussion

The split-crest technique described in 1986 by Nentwig GH for narrow ridges is a predictable, simple and rapid and allows the simultaneous placement of implants (if they achieve primary stability) associated with the separation of the two bone cortical since there is a bone marrow to separate them and adequate bone height. This new space created must be regenerated and horizontal bone regeneration can be complemented.

Massimo Simioni et al. in 1992 indicated a horizontal gain between 1-4 mm and histologically bone regeneration between the two cortical ones; Giovanni Bruschi et al. in 2017 report a survival rate of implants after 3 years of 98.54% and a vertical gain of 0.89  $\pm$  0.39 mm.

## Conclusion

In cases of narrow bone ridges and where there is a medulla between the two cortical, this technique presents itself as a simple

option technically with predictable results.

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