

## The use of resorbable heterologous Cortical Lamina and micronized collagenated bone in the regeneration of atrophic crestal ridges: A surgical technique. Case series

### ABSTRACT

In case of dental implants placement for prosthetic purposes in areas with severe atrophy, it is necessary to regenerate the ridges in order to have a good-quality bone to support the implants. In order to obtain the necessary pre-implant bone regeneration, several grafting techniques are available. An indispensable prerequisite is the stability of the biomaterial in situ, so to be reabsorbed and substituted by new bone. Some graft materials, such as micronized and collagenated porcine bone, have an excellent capacity to be reabsorbed, but do not have the mechanical characteristics that would allow for stability in terms of shape and size. Consequently, it is necessary to adopt a proper technique, able to maintain such biomaterial stable in situ, without micromovements, for about six months. In this article, the Authors propose a technique for the reconstruction of vertical and horizontal atrophic ridges with the use of resorbable biomaterials of porcine origin: cortical lamina in connection with micronized collagenated bone paste and a resorbable membrane of mesenchymal tissue (OsteoBiol® *Lamina* and OsteoBiol® *Putty*, Tecnos®, Giaveno, Italy). In this technique, the use of porcine cortical *Lamina* with a thickness of 1 mm allows for the creation of a semi-rigid moldable “container” in which a collagenated micronized heterologous bone paste can be put as a filler. This kind of biomaterial is easily accessible by blood vessels and is transformed into bone, so to provide a stable support for the implant placement.

### CONCLUSIONS

As during the post-operative check-up newly formed bone around the implants was observed, as well as the complete integration of the inserted *Lamina*, in their conclusions the Authors affirm: *“In our experience, it is possible to propose this technique as an alternative to those previously and currently in use. Additional clinical and histological scientific studies are needed to evaluate the effectiveness of the technique and further develop its potential”*.

### HORIZONTAL AUGMENTATION

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