



## Clinical and histological study of a xenogenic bone substitute used as a filler in postextractive alveolus

### ABSTRACT

The remodeling process following a tooth avulsion results in a three-dimensional modification of the alveolar bone, making the insertion of an implant extremely difficult and requiring an augmentation procedure. The aim of this study was to evaluate the clinical behavior and the resorption times of the graft material (OsteoBiol® Putty, Tecnos®, Giaveno, Italy), an antigen-free bone paste composed of 80% granulated mix and 20% pure collagen. This product has an average resorption time of less than 4 months. 12 patients were included in the study and all of them required an endosseous implant following the loss of a tooth due to root fracture or periodontal pathology. After the flap elevation and the defect examination, OsteoBiol® Putty was inserted in the cavity by means of a sterile spatula and the flaps were sutured. The histological analysis and the x-ray performed after 3 months showed a complete resorption of the heterologous material and its substitution with trabecular bone tissue.

### CONCLUSIONS

The Authors appreciated the ideal malleability and plasticity of the product that allow a very simple application. Moreover, this biomaterial supports a correct bone tissue regeneration, facilitating and accelerating the physiological processes. In the Authors' opinion, *"this material could be the best indication for the insertion of postextractive implants in sites where the bone defects are more than 2 mm"*. They also concluded that OsteoBiol® Putty can be used also in not prominent or in 3-wall defects, with the advantage of an easy applicability.

### ALVEOLAR REGENERATION

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### ORIGINAL ARTICLE

Minerva Stomatologica  
2005 Jun;54(6):351-62

Grafted with  
BONE SUBSTITUTE  
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