Putty

ENGINEERED FOR PERI-IMPLANT DEFECTS

Pre-hydrated collagenated heterologous cortico-cancellous bone paste
TECNOSS®: A UNIQUE PROCESS THAT ACCELERATES AND GUIDES NATURAL BONE REGENERATION

Tecnoss® developed and patented a unique biotechnology that prevents the ceramization phase of natural bone and preserves the tissue collagen, allowing an osteoclastic-type remodelling of the biomaterial similar to physiological bone turnover and delivering a product endowed with characteristics very similar to human mineral bone(1).

The combination of these factors allows a consistent new bone formation and a close contact between neo-formed bone and biomaterial granules and a consequent improvement of the contact area around implants(A).

COLLAGEN: A KEY FACTOR FOR BONE REGENERATION

Collagen has a key role in bone regeneration process in that:

a) it acts as a valid substrate for platelet activation and aggregation
b) it serves to attract and differentiate the mesenchymal stem cells present in the bone marrow(2)
c) it increases the proliferation rate of the osteoblasts up to 2/3 times(3)
d) it stimulates the activation of the platelets, osteoblasts and osteoclasts in the tissue healing process

OSTEOBIOL®: UNIQUE COLLAGENATED BIOMATERIALS

Thanks to the innovative Tecnoss® technology, the OsteoBiol® line has the following important characteristics:

1) absence of a foreign body response
2) gradual resorption over time(4)
3) stimulation/acceleration of physiological tissue healing process
4) protection of the grafting site from infection (membranes)

The Tecnoss® new generation of biomaterials, thanks to a revolutionary technology, goes beyond the simple role of aiding natural bone regrowth by stimulating and accelerating this vital physiological process.
Putty is a collagenated bone paste composed by 80% micronized cortico-cancellous granules (<300 microns) mixed with 20% collagen gel. The exclusive Tecnoss® manufacturing process guarantees an exceptional malleability and plasticity: furthermore the new syringe packaging gives Putty extraordinary handling properties making this product the ideal choice for post-extractive sockets, self-contained peri-implant defects and all defects that present a self-contained cavity.

Thanks to the collagen component, Putty facilitates blood clotting and the subsequent invasion of repairing and regenerative cells. Furthermore, the Tecnoss® manufacturing process avoids granules ceramization, allowing a progressive resorption of the biomaterial and, at the same time, a significant new-bone formation rate. Putty’s “soft” consistency also guarantees an easy and healthy soft-tissues healing.

Thanks to these unique characteristics, Putty is particularly indicated for peri-implant defects regeneration: following immediate post-extractive implants placement, Putty can be injected between the defect walls and the implant, guaranteeing a perfect filling of the entire defect volume.

The product versatility also makes Putty the ideal solution when bone tissue has been lost due to peri-implant lesions as long as the containing walls are present. In fact, the primary condition for gaining a successful regeneration is to achieve the biomaterial initial stability. Therefore, Putty must be used only in self contained defects where the surrounding walls guarantee this condition: for example post-extractive sockets and inside the bone crest when ridge-split technique is adopted.
Excellent clinical performances

CASE REPORT

PERI-IMPLANT DEFECT

Treatment of peri-implant defect after post-extractive implant placement

Sex: Female | Age: 32

Fig. 1 Preliminary panoramic view
Fig. 2 Dentascan shows internal root resorption of tooth 1.1
Fig. 3 Buccal view
Fig. 4 Palatal view
Fig. 5 Occlusal view after extraction
Fig. 6 Osteotomy performed
Fig. 7 Implant in place
Fig. 8 Peri-implant gap grafted with OsteoBiol® Putty
Fig. 9 Free gingival graft harvested from the palate
Fig. 10 Occlusal view
Fig. 11 Buccal view
Fig. 12 Temporary restoration in place

Documentation courtesy of
Dr Roberto Rossi
M.Sc. in Periodontology
Private practitioner in Genova, Italy
e-mail: drrossi@mac.it

Bone substitute: OsteoBiol® Putty
Tecnoss s.r.l. is an innovative, globally active company that develops, produces and documents premium-quality xenogenic biomaterials by the brands Tecnoss® and OsteoBiol®.

Its 15 years of research led to its patent-protected production process that ensures neutralization of antigenic components in order to achieve biocompatibility, while preserving the natural collagen matrix inside the biomaterial.

Tecnoss® products comply with highest quality standards such as ISO13485 (notified body TÜV Rheinland), 93/42/EC (amended by 2007/47/EEC) and 2003/32/EC (notified body CE 0373).