

Special Issue on
**Reconstructive and Regenerative Therapy of Atrophic
Jaws with New Implant Techniques: Preclinical and
Clinical Studies**

CALL FOR PAPERS

The objective of the bone regeneration is to promote the formation of new bone to reconstruct an atrophic alveolar ridge before implant placement or in conjunction through the use of fillers of different nature or by use of biostimulants.

The correction of bone atrophy was traditionally performed primarily with four modes: the guided bone regeneration (GBR), the block plug (intra- or extraoral origin), the ridge expansion (Split Crest), and the maxillary sinus lift.

At the moment, in the international scientific community, there is great interest in the surgical techniques used today, from the conventional to the most modern and revolutionary, because they related to technological development and the discovery of new materials.

The biological regeneration is today the most important interdisciplinary field of research in which engineering principles and basic sciences are used to develop biological substitutes that can repair, regenerate, or improve the function of bone tissue damaged by trauma, degenerative diseases, the simple process of aging, and atrophy induced in dental alveolus, from simple tooth extraction in the case of the jaw. Much progress that has been made in the field of bone regeneration with innovative therapeutic techniques, which include smart bone regeneration, stem cell, new biomimetic materials, growth factors, platelet concentrates, gene therapy, and alternative precision engineering techniques.

The real "last face" of biomaterials research in dentistry appears to be the vertical regeneration through heterologous blocks only supported by a valid blood product that can give you that "biological push" that eases the regeneration process within the entire block with sufficient neovascularization and osteoblastic activity to get a vertical upward suitable to implant rehabilitation ridge. The special issue has the purpose of presenting these studies and discussing aspects.

Potential topics include but are not limited to the following:

- ▶ New biomaterials and techniques of bone regeneration
- ▶ New bone substitutes for reconstructions of atrophic jaws
- ▶ New technologies and strategies in oral regenerative medicine and bioengineering
- ▶ New implant techniques and prostheses for edentulous maxillary
- ▶ Use of blood components in bone regeneration and implant osteointegration processes
- ▶ Use of short implants instead of bone vertical augmentation

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/bmri/biomaterials/trraj/>.

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