Early build-up technique eight weeks after tooth and implants removal

Objectives
The objectives of the “early build-up technique” are to simplify the hard tissue augmentation procedure and to reduce discomfort for the patient. The biological approach is to augment simultaneously bone and keratinized gingiva in the early phase of the post-extractive healing process.

Methods
The surgical protocol provides for the avulsion of 3.3 tooth and removal of 3.4, 3.6 implants because of caries of 3.3 and abscess of 3.6 implant. Eight weeks from extraction, the augmentation procedure is carried out using current biomaterials only. The volume of Bio-oss, Mucograft included, exceeds the volume of original alveolus in order to provide for resorption of bone substitutes. The flap only in keratinized gingiva is designed in such a way as to make the exposed surface of the matrix resemble a post-extractive alveolus. Bacterial wound proliferation is controlled with one week antibiotic therapy, clorexidine mouthwashes and application of hyaluronic acid.

Results
Soft tissue results: the exposed surface of the Mucograft is covered after 2 weeks and it is sealed by soft tissue after 4 weeks, with augmentation of 1-2 mm keratinized gingiva in 3.4 area. Hard tissue augmentation. The greatest linear horizontal and vertical bone gain are detected by cone-beam computed tomography before and after the “early build-up” technique. In 3.3 and in 3.6 the future implant installation is in the bone augmented.

Conclusions
Like the ridge preservation technique, wound healing with current biomaterials exposed is also possible without problems 8 weeks from extraction. Bone volume and keratinized gingiva are augmented with a unique surgery.