عنوان مقاله:

Current Concepts in Scaffolding for Bone Tissue Engineering

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خلاصه مقاله:

Bone disorders are of significant worry due to their increased prevalence in the median age. Scaffold-based bonetissue engineering holds great promise for the future of osseous defects therapies. Porous composite materials andfunctional coatings for metallic implants have been introduced in next generation of orthopedic medicine for tissueengineering. While osteoconductive materials such as hydroxyapatite and tricalcium phosphate ceramics as wellas some biodegradable polymers are suggested, much interest has recently focused on the use of osteoinductivematerials like demineralized bone matrix or bone derivatives. However, physiochemical modifications in terms ofporosity, mechanical strength, cell adhesion, biocompatibility, cell proliferation, mineralization and osteogenicdifferentiation are required. This paper reviews studies on bone tissue engineering from the biomaterial .point of viewin scaffolding

کلمات کلیدی:

Bone tissue engineering, Regeneration, Scaffolds