سیویلیکا - ناشر تخصصی مقالات کنفرانس ها و ژورنال ها
گواهی ثبت مقاله در سیویلیکا
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عنوان مقاله:
Microwave assisted synthesis of resorbable brushite bone cement; in vitro study

محل انتشار:
اولین کنگره بین المللی مهندسی بافت و پزشکی بازساختی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

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خلاصه مقاله:
Calcium phosphate cements (CPCs) are attractive as bone substitutes due to their injectability and self-setting ability in physiological conditions and other interesting points, i.e. biocompatibility, osteoconductivity, osteoinductivity, biodegradability, bioactivity, and interactions with cells.brushite cement was prepared through microwave-assisted synthesizing method. Dicalcium Phosphate Dihydrate: DCPD were prepared by mixing water with a powder consisting of an acidic calcium phosphate (monocalcium phosphste monohydrate) and a basic calcium phosphate (β tricalcium phosphate)Ca-deficient apatite layer was deposited on the composite surface after immersing in SBF for 7 and 14 days. Field emission scanning electron microscope (FESEM) images indicated that brushite cement facilitates cell adhesion.It was conclude that CPC can overcome the defects of previously developed natural CPCs and be potential .candidates as bone cements for clinical application of bone repair and regeneration

کلمات کلیدی:
Brushite calcium phosphate cement, Osteoinductivity, Bioactivity

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