

عنوان مقاله:

Films of Chitosan and PEG-based Polyester as Wound Dressings: Antibacterial Study

محل انتشار:

دهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1391)

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خلاصه مقاله:

An ideal wound dressing can restore the milieu required for the healing process, while protecting the wound bed against penetration of bacteria and environmental threats [1]. Chitosan(Ch) is a biocompatible, biodegradable, non-toxic and antibacterial polymers but it shows less flexibility to filmforming. Blending Ch with polyethylene glycol fumarate (PEGF) could obviate drawbacks of Ch and PEGF while improve Ch/PEGF mechanical properties. PEGF is based onPEG and fumaric acid that both are biocompatible, non-toxic and biodegradable [2]. The Ch/PEGF blend film is promisingmaterial for using as wound dressing due to have the suitable vapour permission, flexibility, and biocompatibility. The existence of functional groups of Ch (amino groups) on thebackbone of the blends help the blend to keep the antibacterial activity against gram positive and gram negative pathogens.The objective of this research was to evaluate the influence of composition ratio on the antibacterial activity of wound dressing based on .Ch and PEGF

کلمات کلیدی:

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