

Bio-based Polymers containing traditional medicinal fillers for wound healing applications- An evaluation of Neoteric development and Future Perspectives

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Abstract

In recent years, health care providers have seen an increase in the number of patients with difficult-to-treat wounds and burns. The bio polymer-based wound dressing shields the injured part and aids in the recapture of epithelial and dermal tissues throughout the process of healing. The total count of a person with chronic lesions has been expanding whole due to developing society, over weight and cardiovascular illness. The development of ideal wound dressing material with excellent characteristics like antimicrobial activity, biocompatibility, free radical scavenging capacity, non-adherent property, the hydrophilicity of alginate, cellulose, chitosan, collagen has an increasing demand for the treatment of chronic wounds. Nevertheless, owing to the above mention property, natural polymers are being used for several key functions of biomedicine like narcotic distribution systems, tissue manufacturing, bandages etc. accordingly, the significance of these bio-based polymers interfered with healing functions that lead to inform and inspire youth and scientist researchers worldwide to grab with these far-reaching areas of medicine and biology. The review highlights the physiochemical property of natural polymer, biological evaluation of various materials as wound dress, along with their synthesis and mechanical properties, clinical status, challenges and future perspectives.

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