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Pharmacognosy of Traditional Medicinal plant used for Wound Healing

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Abstract: Wound healing is a sophisticated process that results in the repair of damaged tissues. Cutaneous wound healing is the process by which skin repairs itself. In the current times, different types of biopolymers are being researched for developing economical, sustainable, stable, and effective delivery system for the treatment of wound. A wound is a breakage in tissue continuity that can be produced by physical, chemical and thermal damage. It is a generally called as physical injury that cause opening and breaking of skin. Healing of chronic cutaneous wound is a big problem and it involves the restoration of continuity after wounding. Dermal fibroblasts migrate into the wound bed and proliferate, creating "granulation tissue" rich in extracellular matrix proteins and supporting the growth of new blood vessels. Ultimately, this is remodelled over an extended period, returning the injured tissue to a state similar to that before injury. India has a rich tradition of plant-based knowledge on healthcare system. Several herbs and medicinal plants proved to be a wound healers were identified and formulated for treatment and management of wounds. Various herbal products have been used in management and treatment of wounds over the years. The main objective of treating a wound is to either shorten the time required for healing process or to minimize the undue effects. Plants due to presence of various valuable active phytoconstituents have immense potential for management and treatment of wounds over the years.

Keywords: 3D bioprinting; organ-on-a-chip; bionic tissue; bioink; cell culture

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