ABSTRACT

THE EFFECT OF CHITOSAN TYPE AND CONCENTRATION ON CHARACTERISTICS OF SPRAY GEL SPRAY AS WOUND HEALING

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Chitosan is a polysaccharide consisting of glucosamine and N-acetylglucosamine which can be used as wound healing. Aloe vera, as antibacterial can be used to improve the effect of chitosan as wound healing. The spray gel has benefit such as can reduce the pain when delivering the drug to the wound, cold sensation, and easy to cleaning after product application. The spray gel has a specific characteristic such as organoleptic, viscosity, spreadability, drying time and pH. This study was to determine the effect of different chitosan type and concentration against the physical characteristics and stability of chitosan-Aloe vera spray gel as wound healing. The results showed that the addition of chitosan with different type and concentration can affect the spray gel characteristics that increasing viscosity and pH, but the pattern spreading and drying time was reduced. In the physical stability test, it showed that the spray gel characteristic viscosity of the preparation decreased, pH was stable, the dispersion pattern and drying time was increased.

Keywords: Chitosan, extract Aloe vera, Spray gel, Wound healing.