Production of Biomembranes and Pharmaceutical Formulations from Mangaba Latex (Hancornia speciosa) to Aid in the Healing of Leg Ulcers in Patients with Diabetes Mellitus

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The Diabetes mellitus is a chronic disease that brings varied complications, among which stands out the ulcerations. In this context, this research had the aim of producing biomembranes from the mangaba latex to aid in the healing of leg ulcers in diabetic people. The biomembranes were developed through aqueous solutions of latex. Then physical-chemical analyzes and infrared in the structure of biofilms were carried out. Besides, biological, antimicrobial and cytotoxic tests were performed as well the production of formulations from mangaba latex. In this way, it's possible to indicate that the aim of the research was achieved, once were able to indicate that the mangaba latex presented cell viability in different concentrations when compared to the control group, besides antimicrobial activity against strains of bacteria Pseudomonas aeruginosa ATCC 27853 and low cytotoxicity for Artemias salinas. In this research we can highlight the excellent thermogravimetry and calorimetric stability up 200ºC of the biomembranes. We highlight the product CicatriBIO, developed in three different pharmaceutical formulations, in order to attend various pathologies. Thus, the prospect is that these products will become, after testing in vivo and in humans, an alternative to synthetic products to treat leg ulcers in diabetic people. Key words: Biomembranes; Diabetes; Hancornia speciosa

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