

## EFFECT OF *CANAVALIA BRASILIENSIS* SEED LECTIN IN WOUND HEALING IN MICE

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Lectins form an important class of carbohydrate-binding proteins. *Canavalia brasiliensis* lectin (ConBr) is a sugar-binding specificity [D-mannose (D-glucose)] protein. The aim of this work was evaluate the topical treatment of cutaneous wounds using ConBr. Surgical wounds (1cm<sup>2</sup>) were produced aseptically in the dorsal region in albino male *Swiss* mice. The mice were divided into three groups (n=15/group), each wound was daily treated (100µL) along 12 days, as follows: C (150mM NaCl); ConBr50 (50µg/mL); ConBr100 (100µg/mL). During the postoperative period (PO), the wounds were submitted to the clinical evaluation until the 12<sup>th</sup> day. Histopathological analysis of the injuries have been carried at 2<sup>nd</sup>, 7<sup>th</sup> and 12<sup>th</sup> days PO. The best healing activity was observed in ConBr100 group where the flogistic signs were less intense - hyperemia and oedema were visualized in 10% of lesions until 5<sup>th</sup> and 3<sup>d</sup> days PO; at 12<sup>th</sup> day PO, had presented contraction percentile (96.40%) superior to C and ConBr50 groups. Under the histopatologic aspect, this group presented the more advanced wound healing process at 12<sup>th</sup> day PO, showing re-epitelialization, fibrous cicatricial tissue with collagen fibrils well-advanced organization. These results suggest the possible clinical employment of the ConBr lectin.

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**Key words:** Lectins; *Canavalia brasiliensis*; Wound Healing; Cutaneous Wounds