**RESEARCH ARTICLE**

# PRECLINICAL STUDY OF HEALING EFFECT OF METHANOLIC EXTRACT OF *CORIANDRUM SATIVUM* IN WOUNDS OF AN ANIMAL MODEL OF DIABETES

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**Abstract:** People with Diabetes Mellitus often use medicinal plants to treat this metabolic disease that frequently reports complications, such as impaired wound healing. *Coriandrum sativum* has a wide range of healing properties: antibiotics, antifungals, hypoglycemics and antioxidants to name a few. However, no studies have been conducted on its potential as a wound healing agent. So, the objective of this work was to determine the wound healing effect of the methanolic extract of *C. sativum* seeds in reducing the closing time of surgical lesions in *Long Evans black* rats induced to a diabetes model with alloxane. Material and methods: Toxicity tests were performed using the *Artemia salina* model and phytochemical test were conducted to determine the composition of the extract. The Diabetes model was induced with alloxane and wound was done with a biopsy punch. During the experiment, 6 groups of 5 rats each were included and the diameter of the wound was measured at days 0, 7, 14 and 21. At the end of the observation period, the animals were sacrificed and histological analysis of the wound skin was performed. Results: The alloxane treated group (diabetes model) had delayed wound healing. The group treated with the extract at a concentration of 2000 µg/mL presented wound closure on day 16 and histological characteristics similar to normal tissue of the control group. Conclusions: *C. sativum* methanolic extract accelerated wound healing, which was confirmed by histological analysis.

**Keywords:** Diabetes Mellitus, Coriandrum sativum, Scarring effect, Hyperglycemia, Healing effect, Wound healing

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