

## Evaluation of Excision Wound Healing Activity of Ethanolic Extract of Michelia Champaca in Diabetic Wistar Rats

**Authors :** Smita Shenoy, Amoolya Gowda, Tara Shanbhag, Krishnananda Prabhu, Venumadhav Nelluri

**Abstract :** The study was undertaken to assess the effect of ethanolic extract of Michelia champaca on excision wound healing in diabetic wistar rats. Excision wound was made in five groups of rats after inducing diabetes with streptozotocin in four groups. Paraffin was applied to wounds in nondiabetic and diabetic control and 2.5%, 5%, 10% ointment of extract to wounds in three diabetic test groups. Monitoring of wound contraction rate, the period of epithelization and histopathological examination of granulation tissue was done. There was a significant ( $p < 0.05$ ) decrease in the period of epithelization and a significant increase in the wound contraction rate on day 12 and 16 in rats treated with 5% and 10% ointment as compared to diabetic rats. There was a better organization of collagen fibers in the granulation tissue of wounds treated with 10% ointment. The higher dose of ethanolic extract of Michelia champaca promoted wound healing in diabetic Wistar rats.

**Keywords :** Michelia champaca, excision wound, contraction, epithelization

**Conference Title :** ICPP 2014 : International Conference on Pharmacy and Pharmacology

**Conference Location :** Bangkok, Thailand

**Conference Dates :** December 24-25, 2014