

## THE WOUND HEALING EFFECT OF POWDERED CARICA PAPAYA LEAVE

UKOBA O<sup>1</sup>, ADEFISAN. I. E<sup>2</sup> & AGUWA. U. S<sup>3</sup>

<sup>1</sup>Department of Human Anatomy, Faculty of Basic Medical Sciences, College of  
Medicine, University of Ibadan, Ibadan Oyo State, Nigeria

<sup>2</sup>Department of Human Anatomy, Faculty of Basic Medical Sciences, College of  
Medicine, University of Lagos, Lagos State, Nigeria

<sup>3</sup>Department of Human Anatomy, Faculty of Basic Medical Sciences, College of  
Medicine, Madonna University Elele Rivers State, Nigeria

### ABSTRACT

Carica papaya has been investigated in treatments of ulcers and wounds especially in developing countries. This study was aimed at investigating the wound healing efficiency of powdered Carica papaya leave. Wistar rats were divided into 3 groups: Group 1(control): Treated with normal saline. Group 2 (control check): Treated with propylene glycol alone, Group 3 (experimental): Treated with powdered Carica papaya leave. Wound was inflicted and dressed with normal saline; propylene glycol and powdered Carica papaya leave respectively. The efficacy of treatment was assessed by the rate of wound closure, Wound contraction, fibroblast cell count and histology of granulation tissue. The result showed an insignificant difference in wound contraction ( $P > 0.05$ ). Significant difference in wound closure was observed with group 3 been the fastest ( $P < 0.05$ ). Fibroblast cell count showed statistical significant difference among the groups and across days ( $P < 0.05$ ). Scar tissue also showed significant difference in fibroblast cell counts ( $P < 0.05$ ). In conclusion, our study gave scientific background for the use powdered Carica papaya leave as a potential wound healing agent which is potent and faster in wound healing as against papaya extracts and normal saline among Wistar rats. It has also documented that propylene glycol has an enhancing therapeutic property in the wound healing process among Wistar rats.

**KEYWORDS:** Wound Healing, Carica Papaya, Fibroblast, Wound Contraction