



GAZİ
2ND INTERNATIONAL
GPSS
GAZİ PHARMA SYMPOSIUM SERIES
SYMPOSIUM
SERIES
PHARMA
Turkey 13
11 2017
OCTOBER - ANKARA

2ND INTERNATIONAL GAZİ PHARMA SYMPOSIUM

ABSTRACT BOOK

O31

ETHANOL EXTRACT OF AERIAL PART OF SALVIA HUBERI HEDGE EXHIBITED ANTIOXIDANT AND WOUND HEALING ACTIVITIES IN DIABETIC RATS

Yusuf Ozay¹, Zuhul Yildirim², Cosar Uzun³, Ebru Gokalp Ozkorkmaz⁴, Yusuf Camlica⁵, Sevda Guzel⁶, Ahmet Kahraman⁷

¹Department of Medical Biology, Faculty of Medicine, Adiyaman University, Adiyaman, Turkey

²Etimesgut Public Health Laboratory, Etimesgut, Ankara, Turkey

³Department of Biophysics, Faculty of Medicine, Mersin University, Mersin, Turkey

⁴Faculty of Health Sciences, Ankara Yildirim Beyazit University, Ankara, Turkey

⁵Department of Biology, Faculty of Science, Mersin University, Mersin, Turkey

⁶Department of Pharmacognosy, Faculty of Pharmacy, Mersin University, Mersin, Turkey

⁷Department of Biology, Faculty of Arts and Science, Usak University, Usak, Turkey

The effects of ointment prepared with *Salvia huberi* extract that was topically applied on excisional and incisional skin wounds with experimental diabetes were studied in this work. Male Wistar albino rats weighting 200-250 g were used in this study (n:60). Rats were divided into 5 groups consist of 12 animals. A single dose of streptozotocin (45 mg/dl) was given to rats intraperitoneally to introduce diabetes. After 7 days of STZ injection, blood glucose levels above 250 mg/dl were accepted as diabetic. At regular time intervals blood glucose levels were measured for diabetes follow-up. Excisional wound was created with 1.5 cm and also incisional wound was created with 4 cm diameters in diabetic rats under anesthesia. Wounds were cleaned with saline solution and disinfected with Betadine. Glycol stearate, propylene glycol and paraffin were added in the ratio of 3:6:1 to prepare a simple ointment base. Extracts of 0.5 % and 1% of *S. huberi* were added respectively in mixtures to prepare the ointments and were topically applied to wounds. After the treatment period was ended, tissues were evaluated with macroscopic, histopathological and biomechanical analysis. NO, MDA and glutation levels were investigated as well. Macroscopic and biochemical studies revealed that both in excisional and incisional skin wounds, wound healing of *S. huberi* groups were statistically significant compared to control groups ($p < 0.05$) according to dosage and time. According to histopathological results, treatment with ointment of *S. huberi* extract induced significant histological changes in diabetic and treated groups compared to control groups in the meaning of reepithelialization, granulation tissue thickness and angiogenesis. In conclusion, ointment prepared with extract of *S. huberi* has a healing effect on excisional and incisional diabetic wounds when histopathologically compared to control groups. It was also seen that *S. huberi* changed antioxidant levels. When all results were combined it can be said that healing ratio changes according to application of dosage and time.

This study was supported from Adiyaman University Scientific Research Center TIPFBAP/2015-0004.