

The effects of scolopendrid aqua-acupuncture applied to the LR14 on galatosamine-induced liver injury

S. KIM¹ · D. YOUN² · S. LEE³

¹Wonkwang Univ Hospital, Gwangju, REPUBLIC OF KOREA,

²Dept Meridian and Acupoint, Dong-Shin University, Gwangju, REPUBLIC OF KOREA

³Dept Acupuncture and Moxibustion, Wonkwang Univ Hospital, Gwangju, REPUBLIC OF KOREA.

Abstract

Scolopendrid has been used as treatment of toxication and pain in the Korean medicine. Galactosamine (GalN) is a hepatotoxin that induces liver injury through the formation of the highly reactive hydroxyl radical lipid peroxidation and damage to the cell membrane. In this study, it was investigated that therapeutic effects of the Scolopendrid Aqua-acupuncture at LR14 acupoint on liver functions and organs of liver cell in GalN-induced liver injury in rats. The experimental rats were divided into four groups (Control group, SHA-1, SHA-2, SHA-3 group). In the Control group, we first injected galactosamine and then didn't treat. In the SHA-1, SHA-2, SHA-3 group, we first injected galactosamine and then injected Scolopendrid aqua-acupuncture applied to LR14, each 0.083mg/kg, 0.017 mg/kg, 0.008mg/kg. We observed the changes of GOT, GPT, γ -GTP, Total bilirubin, LDH, ALP, Total cholesterol, Triglyceride, HDL-cholesterol, WBC, RBC, HGB, Hct and observation of rat livers by transmission electron microscope (TEM). In the Control group, 2 rats were dead. The obtained results are summarized as follows: In the change of GPT content, SHA-2, SHA-3 groups were significantly decreased. In the change of γ -GTP, SHA-2 groups were significantly decreased. In the change of Total bilirubin, SHA-2 group was significantly decreased. In the change of Total cholesterol, SHA-2 group was significantly increased. In the change of Triglyceride, SHA-1, SHA-2 groups were significantly decreased. In the change of HDL-cholesterol, SHA-2 group was significantly increased. In the change of WBC, SHA-2 group was significantly decreased. In the SHA-2, SHA-3, the nucleus was globular, cytoplasm was full in the rat liver cell.

the Scolopendrid Aqua-acupuncture (0.017 mg/kg) at LR14 was observed to have a therapeutic effect on liver function and lipid metabolism.