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EVALUATION OF THE ANALGESIC ACTIVITY OF COENZYME Q10 OINTMENT IN MICE

ABSTRACT:

The aim of this study is to examine analgesic effect of Coenzyme Q10 ointment in mice. Fifteen healthy male albino mice were selected for this study. The animals were divided into three groups of five animals for each group. The pain reaction time was recorded pretreatment for each animal and was taken as a basal threshold(1). Group 1 served as a control and was applied Vaseline ointment topically on fore and hind limb. Group 2 and 3 were applied topically Coenzyme Q10 ointment 4%, 8% respectively on fore and hind limb. The onset and duration of analgesic effect of Coenzyme Q10 ointment were evaluated in mice by utilizing a Hot-Plate test at 55±1˚C. Latency reaction time was recorded after 3min. and (10- 60 min) after ointment applied. The prolongation of latency times compared with the values of the control was used to express about analgesic effects of Coenzyme Q10 ointment and the percentage of antinociceptive ,Maximal Possible Effect (MPE) was calculated. The Coenzyme Q10 ointment at concentrations (4%, 8%) produced analgesic effect in mice after 3 min, respectively in comparison with control. The percentage of maximum possible effect (MPE) was significantly increased in group treated with (4%,8%) Coenzyme Q10. It can be concluded that, the Coenzyme Q10 ointment have a good analgesic activity in mice after 3 minutes of topical application and prolong the duration of analgesia more than 40 minutes depending on concentration of Coenzyme Q10 ointmen.