

# **EFFECT OF THE AQUEOUS EXTRACT OF MATRICARIA CHAMOMILLA ON STRESS- ETHANOL INDUCED ACUTE GASTRIC ULCERATION IN RABBITS**

## **Abstract**

The anti-ulcer effect of the aqueous extract of *Matricaria chamomilla* flowers (chamomile extract, CE) had been tested on stress-ethanol induced gastric ulceration in rabbits. The first part of the study was to induce acute gastric ulceration by stress or stress–ethanol combinations. Stress alone was unable to produce gastric ulcerations while ulcer was induced in the group of rabbits exposed to stress in the presence of ethanol (5ml / kg) with a mean value of ulcer index of  $108.3\text{mm} \pm 29$  (n=8). Histopathological examination was done to confirm the effect of stress-ethanol combination on gastric mucosa. The second part of the study was performed to investigate the pharmacological effect of various concentrations of the aqueous extract of chamomile (1%, 4% and 8%) on gastric ulceration. The extract was given 15 minutes before ethanol administration. The results have shown a significant anti ulcer effect of chamomile extract with mean values of ulcer index of  $76.4\text{mm} \pm 14.2$  ( $P < 0.01$ );  $11\text{mm} \pm 14.2$  ( $P < 0.005$ ) and  $53\text{mm} \pm 27.9$  ( $P < 0.01$ ) for the concentrations 1%, 4% and 8% respectively as compared to the control value of  $133.25\text{mm} \pm 46.2$  (n=8). It is concluded that the extract of *Matricaria chamomilla* flowers has anti ulcer effect.