

## ABSTRACT

In the present study methanolic extract of *Convolvulus scindicus* whole plant has been subjected for anti-inflammatory potential by *in vitro* and *in vivo* method. Different concentrations of plant extract and indomethacin has been prepared in normal saline. *In vitro* anti-inflammatory activity was assessed by membrane stabilization assay, protein denaturation assay, proteinase inhibitory activity and *in vivo* anti-inflammatory activity by carrageenan induced paw edema. Extraction of plant extract was done by maceration and indomethacin was used as a standard drug.

The result showed that maximum membrane stabilization in hypotonicity induced haemolysis and heat induced haemolysis were 80.75% and 57% at concentration of 1mg/ml as compared to standard drug respectively. The results of protein denaturation and anti proteinase activity showed maximum inhibition of 79.4% and 73% at concentration of 0.5 mg/ml and 1 mg/ml respectively. The percentage protection against edema for indomethacin and plant extract for time interval 0.5-3h were 14-65% and 12-66% respectively. The plant extract showed slightly less anti-inflammatory potential as compared to standard drug but being a natural drug has less side effects. The results of *in vivo* and *in vitro* assay revealed that *C. scindicus* whole plant possesses good anti-inflammatory properties and could be used in near future against many inflammation disease.