

**Table (1): maximum angle of extension, histopathological score, and biochemical changes in different OA groups.**

Animal groups	Maximum angle of knee extension (degree)	Histopathological score	Serum IL1- $\beta$ (ng/ml)	Serum MMP13 (pg/ml)	GSH(mg/dl)
<b>Control non-osteoarthritic group</b>	22(20-25)	0 $\pm$ 0	0.26 $\pm$ 0.02	6.3 $\pm$ 0.50	14.86 $\pm$ 0.58
<b>Non-treated OA group</b>	55(50-60) <sup>#</sup>	10.97 $\pm$ 1.13 <sup>#</sup>	0.77 $\pm$ 0.08 <sup>#</sup>	20.39 $\pm$ 0.86 <sup>#</sup>	6.86 $\pm$ 0.37 <sup>#</sup>
<b>Glucosamine treated OA group</b>	31(26-34) <sup>##</sup> <sup>\$\$</sup>	3.9 $\pm$ 0.52 <sup>##</sup>	0.30 $\pm$ 0.03 <sup>##</sup> <sup>\$\$</sup>	9.27 $\pm$ 0.84 <sup>##</sup> <sup>\$\$*</sup>	11.30 $\pm$ 0.32 <sup>##</sup> <sup>*</sup>
<b>Atorvastatin treated OA group</b>	29(26-32) <sup>##</sup> <sup>\$\$</sup>	1.66 $\pm$ 0.57 <sup>##</sup> <sup>\$\$</sup>	0.46 $\pm$ 0.09 <sup>##</sup> <sup>\$\$</sup>	7.3 $\pm$ 0.50 <sup>##</sup> <sup>\$\$*</sup>	11.98 $\pm$ 0.37 <sup>##</sup> <sup>\$\$*</sup>

Data are presented as means  $\pm$  SD, n=8 rats in all except the maximum angle of knee extension presented as median (range).

Significant at (p< 0.05).

# Significance versus control normal group.

\* Significance versus osteoarthritic group.

\$ Significance versus glucosamine treated group.