

(54) Title of the invention : REPURPOSE OF FLUVASTATIN FOR TREATMENT OF OSTEOPOROSIS

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(57) Abstract :
 Preclinical evaluation of Fluvastatin for treatment of osteoporosis in ovariectomized rats. The albino Wistar female rats were divided into 4 groups of 6 rats in each and treated as follows. Group-I Sham operated receive vehicle (5% Tween 80); Group-II Ovariectomized control receives vehicle (5% Tween 80); Group-III Estrogen (0,0563mg/kg) in ovariectomized rats; Group-IV Fluvastatin (80mg/kg) in ovariectomized rats.). At the end of 42 days, all the rats were deprived of food for whole night. On the next day, urine (0-24h) was collected, then the animals were anesthetized by Ketamine HCl (50mg/kg, ip) and blood samples were taken from common carotid artery loss, ash content, biomechanical, biochemical and histopathological observation were carried out for antiosteoporosis activity. The significant increase in BMD, Ash content and lumbar hardness were observed. In addition, increased levels of calcium and phosphorous is decreased in OVX group and increased levels in Fluvastatin treated animals. The histopathological results also confirm the protective effect of drug. The present findings strongly suggest that Fluvastatin possess the potent antiosteoporosis activity in ovariectomized rats and substantiates the ethnic use in treatment of postmenopausal osteoporosis.

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