Can Ursodeoxycholic acid be Considered as an Alternative Treatment for Postmenopausal Osteoporosis?

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SUMMARY. Osteoporosis is a systemic skeletal disease characterized by low bone mass and micro-architectural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to bone fracture. Bone tissue undergoes constant remodeling. Under the physiologic conditions, bone formation and resorption are in a fair balance. After the third decade of life, bone resorption exceeds bone formation and leads to osteopenia and, in severe situations, osteoporosis. The result is fragile bones and an increased risk for fracture with even minimal trauma. Postmenopausal osteoporosis is thought to result from gonadal (ie, estrogen) deficiency. Estrogen deficiency have been reported to make decrease in 1-25 vitamin D, PTH levels and also calcium absorption and increased of some cytokines (ie. IL-1, TNF-alpha) may cause. it was noticed that Ursodeoxycholic acid (UDCA) may decrease these cytokines and increase fractional calcium absorption. Consequently, we hypothesize that UDCA might be useful Postmenopausal osteoporosis.