Research Article

Biochemical Markers of Bone Turnover in Post Menopausal Mothers and Premenopausal Daughters

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ABSTRACT

This Study was undertaken to study the biochemical markers of bone turnover in postmenopausal mothers and their premenopausal daughters. The study was conducted in 50 postmenopausal mothers of age 45-65years who attended orthopedics outpatient clinic in SRM Medical College Hospital and Research Centre and their daughters aged about 25-45 years. The biochemical markers of bone turnover namely serum calcium, phosphorus and alkaline phosphatase were measured by using standard kits. The data was analysed and difference in the above parameters was compared using software SPSS windows. In postmenopausal mothers the level of serum calcium, phosphorous were decreased ($p<0.001$) compared to premenopausal daughters. In contrast the serum levels of alkaline phosphatase was significantly increased ($p<0.001$) in postmenopausal mothers when compared to premenopausal daughters. The bone mineral density was found to correlate significantly with the above risk markers. The finding indicates that the biochemical markers of bone turnover provides valuable information for the diagnosis and monitoring of osteoporosis which reflects the rate of bone resorption and also for the prediction of future fracture risk especially in the premenopausal daughters.