大白鼠停經間期血清參數變化的研究

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摘要

停經期間，內分泌變化造成骨量的大量流失，易罹患骨質疏鬆症。以往大都以去卵巢大白鼠方式，誘發停經，進而觀察骨量的變化，本實驗則以自然停經的大白鼠進行觀察。

本實驗目的在觀察自然停經間期大白鼠的血清參數以及骨量的變化。依陰道抹片判讀，取二十隻大白鼠，年齡十八至二十二月大，分成五組，利用生化分析及骨組織測定進行觀察。

所得結果為酸性磷酸梅隨著停經年齡增加有顯著升高，鹼性磷酸梅和骨小樑厚度則下降，顯示因停經間期造骨細胞的活性降低與破骨細胞的活性增強導致骨量流失。本實驗因採自然停經的大白鼠進行觀察，其結果較去卵巢方式更接近人類自然停經所造成的骨量流失模式，可供有關自然停經骨量變化研究的參考。

Study on Quantitative Changes in Serum Parameters of Climacteric Rats

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Abstract

After menopause, changes in secretion of calcitonin（CT）and estradiol could result in dramatic bone loss and subsequent osteoporosis and mortality. In addition, up to now, there is no data available concerning studies on prevention and treatment of postmenopausal osteoporosis using a natural menopause animal model. The purposes of this study were: to study the quantitative changes in bone of climacteric rats. Twenty female Sprague-Dawley rats were assigned into five major（18-22 months）groups according to vaginal smear and characterization of estrous cycle. They were evaluated using biochemical assay measuring the concentrations of serum-calcium, -phosphate, -alkaline phosphatase, -tartrate resistant acid －phosphatase（TRAP）, The results of this study indicated that natural menopause could cause 1 ）significant decreases in alkaline phosphatase and 2 ）significant increases in TRAP 3 ）significant decreases in mean trabecular thickness.

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