绝经后健康妇女甲状旁腺激素基因多态性与骨密度的关系

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摘要　利用限制性片段长度多态性分析（RFLP）研究北京地区绝经后妇女甲状旁腺激素（PTH）基因多态性与骨密度的关系。筛选健康、无亲缘关系的绝经后妇女185例，应用双能X射线骨密度仪（DEXA）检测腰椎等部位的骨密度，用PCR-RFLP方法检测绝经后妇女的PTH基因型。绝经后健康妇女中bb、Bb、BB三种基因型的分布频率分别为7.56%、28.11%和64.32%。方差分析显示前臂部位骨密度与PTH基因相关。除华氏三角区外，BB基因型各部位的骨密度值均高于Bb、bb基因型。Logistic回归分析结果显示，bb基因型组骨质疏松与正常妇女存在显著差异（P＜0.001）。PTH基因中B基因型可能对维持骨量具有一定的作用。

关键词　甲状旁腺激素基因　骨密度　骨质疏松症　基因多态性

分类号

Association Study of RFLP of Parathyroid Hormone Gene and Bone Mineral Density in Postmenopausal Women

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Abstract

Association of restriction fragment length polymorphism (RFLP) of the parathyroid hormone (PTH) gene with bone mineral density (BMD) was explored in unrelated postmenopausal women who live in Beijing.One hundred and eighty-five healthy,unrelated postmenopausal women were selected and whose BMDs were measured by dual-energy X-ray absorptioemetry (DEXA).The genotypes of PTH were detected with RFLP method.The frequency of each genotype was bb 7.56%、Bb 28.11% and BB 64.32% respectively.ANOVA analysis showed that the forearm BMD was associated with PTH gene.The women with BB genotype have higher BMD than Bb and bb ones.Logistic regression analysis indicated that there was a significant difference between normal and osteoporosis women with bb genotype (P<0.001).This result indicated that B allele might have some protective effects to bone mass loss.

Key words　parathyroid hormone gene　bone mineral density　osteoporosis　polymorphism

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