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Peak Bone Mass of Iranian Population: The Iranian Multicenter Osteoporosis Study

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Abstract

Osteoporosis is a major public health problem in the Western countries and is projected to have a similar impact in the Middle East. It has been suggested that peak bone mineral density (BMD), a major determinant of osteoporotic fractures later in life, may be lower in this part of the world compared with the Western world. The purpose of the Iranian Multicenter Osteoporosis Study was to determine peak bone mass in a randomly chosen sample of healthy Iranian subjects. A total of 5201 participants (2340 males, mean age 42.7 ± 13.8) were recruited based on randomized clustered sampling from all regions of five major cities across the country. In women, peak lumbar BMD (1.182 ± 0.127 g/cm ^{2}) occurred in the 29- to 33-yr age group, whereas peak total femur BMD (1.006 ± 0.126 g/cm ^{2}) occurred in the 32- to 36-yr age group. In men, peak lumbar BMD (1.181 ± 0.153 g/cm ^{2}) and femoral BMD (1.096 ± 0.159 g/cm ^{2}) both occurred in the 20- to 24-yr age group. When standardized to mg/cm ^{2} units using established formulas, Iranian peak bone mass values are comparable with that of Western countries and are generally higher than that of Eastern Asian and Middle Eastern countries. © 2006 The International Society for Clinical Densitometry.

Reaxys Database Information

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Indexed Keywords

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