Age-related osteoporosis and strategy for management

Ahmed Fathalla Mohamed El-Morshidy

Osteoporosis is an insidious, progressive disease with an celerated loss of bone mass, which leaves the skeleton weakened d more vulnerable to fracture.Osteoporosis is silent until a fracture announces its clini-1resence, often following minimal trauma. Wedge fractures of Pthoracic vertebrae and crush fractures of the lumbar spine t`re often multiple and may result in decrease in height and ovelopment of kyphosis. This spinal deformity then alters thela a role in the high incidece of ,enter of gravity and may p y -.ails among these patients.spinal fractures are more common in women, hip frac-,lirelhile sseiare more evenly distributed by sex and tend to occur at a:.ater age. This fracture.pattern seen in osteoporotics likely eflects an uneven rate of bone loss. Trabecular bone, with its ,11creased surface area and reater metabolic activity, is lostg first and more rapidly; this is followed later by slower cortical :oss. The bone loss also differs between the axial and appendecu-lar skeleton. The change in bone mass results in a series of fracture patterns.In fact, two syndromes of osteoporosis are distinguishable, the first is postmenopausal, affecting only females, and the second is termed senile. The main bone loss in the first type is trabecular bone but in the second is trabecular and cortical bone. trabecular bone is largely lamellar, but it has a much higher surface-to-volume ratio and larger exposed surface area than does cortical bone. Remodeling in this type of bone.