
Radiology of osteoporosis

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Osteoporosis is a quantitative bone abnormality caused by a deficiency of organic matrix. The different classifications of generalized osteoporosis were discussed as well as its aetiologic causes. The main radiological criteria of generalized osteoporosis are seen in long & short bones & in the spine also. Long bones show diminished bone density, thinning of the cortex, coarse trabeculae and fractures at specific sites as neck of femora, neck of humerus & both pubic rami. The most radiological criterion of osteoporosis on the spine is compression fracture of single or multiple vertebral bodies. Specific radiological criteria may accompany the different aetiologic entities of osteoporosis as deformities with osteogenesis imperfecta and horizontal sclerotic band on the compressed vertebral end plate seen with Cushing's syndrome. Osteoporosis is presented with vague symptoms no specific clinical picture. This leads us— 127 —to explain the different radiological methods for investigations in osteoporosis which could be either qualitative or quantitative. Osteoporosis has to be differentiated from other causes of generalized decreased bone density. Thus radiology has a great role in diagnosis of as the radiologist may be the first one to detect and identify its cause.