

Osteoporosis is a systemic disorder characterized by micro architectural deterioration of bone tissue leading to bone fragility and increased susceptibility to fractures. It is a major health problem for the postmenopausal women because of the loss of their endogenous estrogen secretion by ovaries associated with accelerated bone loss.

Identifying patients at risk of developing osteoporosis is important in order to determine those who will be treated. Methods to identify such patients include a thorough medical history to pinpoint clinical risk factors, imaging bone densitometry and laboratory studies.

The past 20 years, many new and highly efficient drug therapies have been introduced most of which rely on antiresorptive principles which include bisphosphonate therapy, estrogen, selective estrogen receptor modulators (SERMs) and Calcitonin, along with calcium and vitamin D, and anabolics such as parathyroid hormone.

Operative treatments of fractures in osteoporotic bone using standard techniques such as are applied in normal bone leads to special problems. The major difficulty is the limited anchorage of any implant in osteoporotic bone. But fortunately, by development of new techniques of internal fixation in osteoporotic bone such as an interlocking screw, screws with an expandable anchor schuhli locking nuts, an expandable nailing system, proximal femoral nail and others the results following fixation of osteoporotic fractures have improved.