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Guidelines on osteoporosis in elderly

Before starting a treatment the diagnosis of primary osteoporosis must be established. This can be done by showing an atraumatic fracture (X-ray) or by bone mineral densitometry (bone mineral density <-2.5 SD). Secondary forms of osteoporosis have to be ruled out. According to all published guidelines osteoporosis treatment consists of non-pharmacological measures and of pharmacological measures. Among the non-pharmacological measures exercise (esp. weight-bearing exercise), physiotherapy and the prevention of falls and fractures are especially important. All patients require vitamin D (400-800 IU/d) and calcium (1000-1500 mg/d). Antiresorptive drugs are bisphosphonates (alendronate, ibandronate and risedronate) and the selective estrogen-receptor modulator raloxifene. Anabolic agents are strontium ranelate and teriparatide (parathyroid hormone). In postmenopausal osteoporosis the use of these drugs is associated with a significant reduction of new vertebral fractures (grade of evidence A). Alendronate, risedronate and strontium (grade of evidence A) and teriparatide (grade of evidence B) have been shown to reduce the number of new non-vertebral fractures. For men a treatment with alendronate has proved to reduce new vertebral fractures (grade of evidence A). Kyphoplasty and vertebroplasty are so far not recommended for routine use, since long term data are missing. Zoledronic acid, given 1/a i.v., seems to be a promising perspective in the treatment of primary osteoporosis.

Literature:

Boonen S et al: Evidence-based guidelines for the treatment of postmenopausal osteoporosis: a consensus document of the Belgian Bone Club. *Osteoporose Int*, 2005; 16: 239-254

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Rosen C: Postmenopausal osteoporosis. *N Engl J Med* 2005; 353: 595-603