

**SECONDARY CONDITIONS LEADING TO BONE LOSS (OSTEOPOENIA OR OSTEOPOROSIS) OR MINIMAL TRAUMA FRACTURES**

**DIAGNOSIS**

**DIAGNOSTIC TESTS**

Hyperparathyroidism

Total serum or ionised calcium and PTH

Hyperthyroidism

Free T4 and TSH

Renal Impairment

Creatinine

Chronic Liver disease

LFT's

Osteomalacia

Calcium, Alkaline Phosphatase,  
25 Hydroxy Vitamin D3 level

Myeloma

Full blood count, ESR, QEPP  
Urine Bence Jones protein

Hypogonadism

Male: Testosterone, SHBG, LH  
Female (only pre-menopausal) : Oestradiol, FSH, LH

Medicines leading to secondary osteoporosis include oral or inhaled corticosteroids, Methotrexate, Azathioprine, long-term Heparin, Cyclosporin and anti-androgens used for the treating of prostate cancer. Dilantin, Phenobarbitone and Carbamazepine produce impaired mineral metabolism and osteoporosis. Potent estrogen inhibitors may also lead to rapid bone loss.

Also consider Rheumatoid Arthritis, SLE, Ankylosing Spondylitis., Coeliac disease, Ulcerative Colitis and Crohn's disease.