

---

# English Summary

---

## OSTEOPOROSIS AS A PROBLEM IN CLIMACTERIC PERIOD

**P. Gonta**

*Dept of Obstetrics and Gynecology, Faculty of Medicine Atrncjoyo Catholic University, Jakarta, Indonesia*

Bone density loss which causes osteoporosis may occur as a consequence of any disturbance of the hypothalamic-hypophysis-ovarial axis. In the climacterium, this disturbance is a natural occurrence bringing osteoporosis as a serious problem for women in this period.

Osteoporotic fractures may be predicted using special radiological techniques, such as dual photon absorptiometry (DPA) and dual energy x-ray (DEXA). As osteoporosis is caused by estrogen deficiency, it is logical to treat osteoporotic patients with estrogens in the form of oral, transdermal or percutaneous implants supplementation.

Non estrogen treatment with calcitonin or biphosphonates is still an important alternative, especially where estrogens are contraindicated.

*Cermin Dunia Kedokt. 1996; 112:25-8*  
**Pg**

## OSTEOPOROSIS

**Dwi Djuwantoro**

*Sebelas Maret University, Faculty of Medicine Alumnus, Surakarta, Indonesia*

Osteoporosis is a generalized bone diseases characterized by decreased osteoblastic matrix

formation combined with increased osteoclastic bone resorption causing a marked decrease in the total amount of bone in the skeleton (osteopenia). Increased bone resorption may be a more important factor than decreased osteoblastic formation.

Since generalized osteoporosis represents a disturbance not only in bone deposition but also in bone resorption, osteoporosis is classified based on the most prominent factor in their etiology and the onset of the disease, even though the resultant skeletal lesion is the same. The types of osteoporosis include postmenopausal, involutional, idiopathic, Juvenile and secondary osteoporosis.

The most frequent form in Caucasians and Asians is postmenopausal osteoporosis. Because the survival in the population throughout the world in the increase this type is the more important one. it has been estimated That at least one in three women over 60 will develop an osteoporosis-related fracture while one in six men over the age of 75 will develop osteoporosis.

Diagnosis of osteoporosis can be made by history of previous fractures, clinical symptoms and signs, laboratory examination and radiologic examination. Bone biopsy is rarely needed to rule out other metabolic bone diseases; it is sometimes used to quantitate bone loss.

Management should include

encouragement of physical activity throughout life, restriction of tobacco and alcohol consumption, maintenance of adequate calcium intake, and avoidance of oestrogen deficiency. In osteoporosis in the elderly, it must be remembered that hip and wrist fracture are usually precipitated by a fall. Steps should be taken to reduce the incidence of falls wherever possible; this may require review of psychotropic, anti-hypertensive and other medications, assessment of the home and external environment and provision of suitable aids, and evaluation of visual problems. General exercises also have a role in maintaining balance in the elderly.

*Cermin Dunia Kedokt, 1996; 112:29-31*  
**Dd**

## DETERMINATION OF CALIBRATION FACTOR OF Cs-137 THERAPY BEAMS USING INTERPOLATIVE METHOD

**Susetyo Trijoko**

*National Atomic Energy Board, Pasar Jum'at, Jakarta, Indonesia*

As a recognized Secondary Standard Dosimetry Laboratory (SSDL) under IAEA coordination, National Calibration Facility of BATAN, also known as SSDL-Jakarta, has been equipped with NPL dosimeter system for secondary standard therapy level together with Co-60 and X-ray therapy machines. The dosimeter system is calibrated periodically by the Primary Standard Dosimetry Laboratory (PSDL). So far the Electrotechnical Laboratory

*(Bersambung ke halaman 20)*