

COMPUTERISED BONE MINERALOMETRY (CBM)

Computerised Bone Mineralometry (CBM), both Total Body and segmentary (lumbar rachis and hip), are carried out in our centre using cutting-edge X-ray technology which combines extremely low doses of radiation with high levels of accuracy in documenting the areas under examination, as well as rapidity of examination.

Which examinations may be carried out with CBM

With a CBM it is possible to measure bone density and, on the basis of data processed automatically by the computer which is linked to the device, to express the degree of mineralization of the bone itself, in other words the level of health or decalcification in relation to the age and gender of the patient. The results of the CBM are more reliable than straightforward radiography, which shows clear alterations only in the event of high levels of mineral loss.

Osteoporosis is a disease which involves the loss of bone mass and results in the weakening of its structure with an increased risk of fracture. It affects approximately four million women and it has been calculated that one in two women over the age of fifty run the risk of bone fracture due to osteoporosis. What is more, the disease has no evident symptoms in its initial stages and when symptoms do begin to emerge (for example, back pain), the situation is already in part beyond repair. This is the reason why it is important to undergo examinations such as CBM, which make it possible to intervene with cures and therapies as early as possible.

How it is carried out

The machine which emits X-rays is located under the bed on which the patient lies, while the image processor is above it. Mostly, the examination focusses on the lumbar area of the spinal column and/or the femur.

From the standpoint of the patient, it is no different from a normal radiography, requires no preparation and involves no pain or annoyance. Examinations usually take about 10 minutes.

Indications

For the purposes of prevention, the CBM is prescribed to women between the ages of 45 and 50 who are approaching menopause, and is repeated a few times at intervals of one or two years to determine the rate of bone mineral loss (decalcification).

This procedure has the aim of identifying women who are rapidly losing bone mass (the so-called fast losers) and are at risk of pathological fractures. A CBM may also be prescribed post-menopause to determine the level of bone mineralisation, and may be repeated to assess the effects of treatment. Such prescriptions are far less common for men, as men are far less prone to senile osteoporosis, and it is far less serious and dangerous.

Contraindications

With current methods, the examination is harmless and may be carried out whenever it is deemed necessary with a prescription from the family doctor, the gynecologist or the orthopaedician. The examination is possible between the ages of 20 and 83, since before and after these ages the examination is meaningless.