

Women in Salta (Argentina) have a lower bone mass than the international average.

OSTEOPOROSIS: the silent disease

- It affects one of every three women over the age of 60. The biggest risk - possibly lethal - is hip fracture.
- Prevention is based on diet, calcium intake, physical exercise, sun light and citric fruits

Women over 50 years of age, thin, and with a sedentary lifestyle are at risk of suffering from osteoporosis; this prospect is even more probable if, in addition, the diet is inadequate (with insufficient calcium content) and combined with smoking and coffee and alcohol intake.

Also called “the silent disease”, this problem affects one of every three women over the age of 60 and 65% of those over 80, while, in men, it affects less than half. It’s a pathology caused by the progressive decrease of bone mass, which makes the bones more fragile and prone to fractures.

“The causes are metabolic and related to the process suffered by the minerals contained in the bone, such as calcium and phosphorous, among others, and which comprise the bone matrix”, explains María Silvia Soto, endocrinologist in the hospital “Dr. Arturo Oñativia”, the main centre in the province specialising in this subject.

The hormonal factor

In general terms, it can be said that osteoporosis is a primary disease that can be expected from the age of 50; it is a primary disease in that it does not depend on or result from any other pathology, but is the result of the normal ceasing of hormonal functions during the menopause.

“When the ovaries stop working, the level of estrogens diminishes and a process of bone demineralisation or decalcification is initiated. This is a normal process within certain values”, says doctor Soto. According to her, these values are currently under discussion, referring to a study of Argentinean women from a specialist in Salta, Mario Remis (see box).

Prevention measures

Today, with life expectancy continuing to increase, the different international scientific organisations keep emphasising the importance of prevention, having even introduced a World Osteoporosis Day on the 20th of October. In addition, the World Health Organisation (WHO) has just alerted that osteoporosis is the second largest health problem on the planet (the first is cardiovascular disease).

Although this is a likely pathology for adults of advanced age, doctors emphasise that is totally possible to reduce its effects and the risk of fractures.

Basic prevention is based on a balanced diet (that includes an adequate calcium intake through milk products from an early age) and regular physical activity. This diet includes moderate consumption of salt and proteins, since an excess leads to calcium losses through the urine. Smoking, alcohol and coffee should be avoided.

From adolescence

Other prevention measures that can be introduced in addition to the above are regular and moderate exposure to solar light in order for the organism to produce vitamin D, which is required for absorbing the calcium used, as well as consumption of citric fruits, which facilitate the fixation of this mineral within the bones.

A report from the Centre of Medical Osteopathy “Dr. Carlos Mautalén” in Buenos Aires, maintains that adolescence is the ideal period in time for preventing this disease, since the bone mass not obtained during this period is never recovered. The so-called “peak bone mass”, with the highest quantity of highest quality bone mass, is reached at about 25 years of age. For this reason, a healthy lifestyle and habits should be promoted to young people, in order to reach old age in the best possible conditions, in a wider sense.

No densitometers in hospitals

The public hospital has had no densitometer for more than three years. By measuring the bone mineral density, densitometers allow an early diagnosis of osteoporosis and to act accordingly. This equipment, although only capable of providing an indication of quantity and not quality, is essential for the patient's future - when the disease is visible on the X-ray image, the bone has already lost one third of its structure. The endocrinologists working in the Oñativia Centre remember that a used instrument, which operated with radioactive material and became highly useful, was donated to the hospital back in 1991. "This equipment worked well for several years until it gave up". After the hospital was left without this essential tool, it made an agreement with a group of professionals who bought a densitometer and installed it in the hospital.

"But this society was dissolved and the instrument was taken away". Only in first time visits, in 1999 (when a densitometer was available), 210 patients were assisted for osteoporosis, while last year, it was only 80; i.e. less than half. The statistics of patients receiving treatment were similar.

Today, this type of diagnosis is only available in the private sector at an average cost of \$ 35 to \$ 40 for both hip and spine checks. The physicians complain that the health insurance, the IPS, only covers one of the two checks for women over the age of 60, when, necessarily, both evaluations need to be performed jointly (hip and spine) and more than a year since the last study.

Risk of fractures

From the age of 50 to 60, the risk of fractures as a result of osteoporosis is of 40% for women and 13% for men. This is a disease in which, because of the slow demineralisation of the bone, symptoms do not manifest immediately, and, in some persons, they never appear. In the majority of the cases, pain and bone deformations emerge when the reduction of bone density has reached a high enough level for the bones to be crushed or fractured. Both in the level of incidence and in frequency, wrist fractures are in first position, followed by humerus, vertebral column and hip. The latter are associated with a global mortality of up to 30%, since one of every five persons affected by those types of fracture dies during the first six months after the accident. Those who survive do so with a bad quality of life, usually with serious disabilities.

The investigations warn of an important degree of morbidity as a result of the fractures and of the fact that at least half of the women affected will not be able to walk unaided. Nine of every ten hip fractures are experienced by people older than 50 years of age, 80% of which are women. A study from the Hospital de Clínicas in Buenos Aires revealed that approximately 70% of the patients who already had a fracture, where not being treated for osteoporosis.

A local study

The physicians in the Oñativia Hospital emphasise that, generally, there are not many epidemiological studies available for this disease. Some time ago, the specialist Mario Remis conducted a study on 700 normal and healthy women between the age of 30 and 80 in order to evaluate their bone mass and compare it with data from other locations, especially from Minnesota (USA), where there is a strong prevalence of this disease. These measurements were conducted on the vertebral column and hips. He found that the women from Salta showed 10% lower values than those obtained in studies from other locations. At the same time, a similar study conducted in Yucatán (Mexico), found values 9% lower than the North American reference values, i.e. a very similar result to that obtained in Salta. Knowing that in Salta the normal and healthy female population has a lower bone density than that in other countries it is possible to determine the pathology when the values are below the mean values. That is, the regional population needs to be evaluated.

The situation

- **Osteoporosis.** Reduction in the bones' mineral content. A common disease for people over the age of 50, especially women.
- **Prevention.** Fracture risk is decreased through adequate diet and physical exercise, among other factors.
- **Reference.** The Oñativia Hospital for endocrinology and metabolism is the specialised centre for the entire province.
- **Appointments.** Patients from the capital can request an appointment at the Endocrinology Unit. Medical appointments are in the mornings and afternoons.
- **Inland patients.** For appointments, these patients can call 4315042 (less congested during afternoon hours).

[FIGURE 1:] WOMEN ARE THE MOST LIKELY TO SUFFER FROM OSTEOPOROSIS FROM THE AGE OF 60

[FIGURE 2:] ADEQUATE NUTRITION IS ESSENTIAL TO PREVENT THE DISEASE