Substitutive hormonal treatment in postmenopause

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Summary: The social impact of menopause is stressed by the actual life expectancy of women. One of the most important post-menopausal alterations – "osteoporosis" – is considered. Particular attention is focussed on therapeutical aspects.

Key words: Menopause - osteoporosis.

Today postmenopause is a much longer period in women's life compared to the past, and if it is not followed and properly treated, it may be affected by various pathologies.

In fact, recent statistical data show that women's life expectancy is over 80 years of age in regions of the temperate European belt.

It is also well known that women over 60 years of age now represent 17-18% of the entire population. These data show very clearly the size of the phenomenon and therefore the problem due to high, constantly increasing numbers of women who are going to face all these regressive alterations connected with postmenopausal hormonal modifications.

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We all know about the disorders in the vegetative field which coincide with hormonal modifications of the climateric period: the behavioural modifications and one of the most important type of metabolism, bone metabolism (1).

Among the postmenopausal involutional phenomena, those related to the locomotorial system and in particular those related to the skeleton, are becoming more and more important, also considering that postmenopausal and senile osteoporosis are now real social phenomena of vast proportions with a very high cost from the organizational and economic point of view, due to the frequent fractures they lead to (2).

Therefore our duty is to try to prevent the mineral loss which sometimes leads to the reduction of the mineral component of 30-40% in the span of very few years (3).

When we speak about prevention, the oestroprogestagens have first place in the pharmacological therapy. When they are given in time and in small doses over long periods, usually for years, they can modify considerably the reabsorption processes carried out by the non-inhibited

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osteoclasts, thus preventing the bone from reducing its resistance, so it may go below the fracture threshold (4).

Oestroprogestagen therapy is carried out in the period just around or after menopause, when the increase of bone metabolic turnover has not yet taken place, or when this phenomenon has not reached an extent such to determine a serious loss. In general, this loss is also due to many other risk factors (5).

In our center, over 2500 women have been treated in 5 years. They have been followed periodically with repeated measurement of radial, femoral or spinal bone mineral content, according to the cases.

From this enumeration of cases, we have been able to realize that when the oestroprogestagens are given over time, using adequate dosage for a suitable period, they can considerably modify the future of the bone, preventing the osteoporotic process and its serious consequences.

On the contrary, when prevention has not been carried out and osteoporosis is already present with mineral losses which, in a period of 5-6 years, may have reached 30-40%, the oestroprogestagens are no longer sufficient to recover the lost substance and to prevent risk of fractures.

At this point, another hormone – calcitonin – has an important therapeutic role. In fact this hormone has been shown, by experiments, to exert a considerable inhibitive activity on osteoclasts and a weak stimulating effect on osteoblasts, with the result of stopping the osteoporotic process evolution thus, in the long run, favouring a certain recovery of the bone mass (6).

Once the calcitonin treatment has started, it must be extended for a long time, from a 6 to 9 month period up to 2 years, with possible intervals and with periodical densitometric controls.

When it is possible to note a combined calcium deficiency, or a vitamin D deficiency, it would be advisable to improve an inadequate diet with a proper amount of these substances (7).

In our studies we have been able to obtain positive results on the loss noticed at the beginning of the treatment, with recoveries from 4 to 6%.

For senile osteoporosis, when the previously mentioned therapies can no longer be logically applied, and when considerable protein deficiencies are combined with a demineralization process, fairly good results can still be otained by giving anabolic hormones (nandrolone decanoate). These products have few contraindications, except that they have a tendency to cause hair growth and voice modifications, but they do contribute to the stabilization and increase of the bone mass.

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