

## 認識骨質疏鬆症

### Understanding osteoporosis

#### Why postmenopausal women will generate osteoporosis?

A reduction in estrogen during postmenopausal period will result in an increase of osteoblast cells and osteoclast cells in women. Meanwhile, a faster action of osteoclast cells and a slower action of osteoblast cells will cause a huge loss of bone mass to result in bone porosity. Hence, the bones tend to fragile during postmenopausal period.

#### Medical Treatments of Osteoporosis

The priority treatment is to change the lifestyle, including to quit smoking, quit drinking, exercise, eating habits, and supplement calcium and vitamin D. On more serious condition, it is necessary to take the following medical treatments:

1. Bisphosphonate drugs: Such as Alendronate sodium tablets, for it is able to inhibit the osteoclast cell action and reduce the reabsorption of bone element. In addition, vitamin D is able to enhance calcium absorption.
2. Selective estrogen receptor modulators: Such as Raloxifene. Its effect may be weaker and more suitable for women who cannot tolerate bisphosphonate drug treatment and women with a high risk of breast cancer.
3. Hormone replacement therapy: Used in preventing and treating osteoporosis during the postmenopausal period. It is suitable for women who cannot tolerate other osteoporosis drug treatment and women with menopause symptoms.
4. Other medical treatments: Calcitonin, parathyroid hormone, RANKL monoclonal antibodies and other drugs.
5. Multi-drug combination therapy: It is used to treat patients with excessive bone density increment and prevent bone fracture. However, the effectiveness is slim.

#### Conclusions

1. Menopause is a major transformation period in a woman's lifetime.
2. It is a priority to choose low-dose hormone replacement therapy, for it is able to improve the menopausal period and improve the life quality.
3. Except for women with a high risk of breast cancer, the hormone supplement therapy is suitable for general women.



4. Select drugs with best efficiency and lowest side effects after their risks and benefits have been carefully evaluated by your specialist physician.
5. Prevention is better than therapy. The best way to reduce the occurrence of bone loss and avoid osteoporosis is to engage in regular exercise, quit smoking, quit alcohol, take up a balanced diet, and supplement enough calcium and vitamin D.