英文

Understanding Osteoporosis

Why postmenopausal women will generate osteporosis?

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 Osteporosis

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: They are able to repress the osteoclast cells 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 osteporosis during the postmenopausal period. It is suitable for women who cannot tolerate other osteoporosis drug treatment and women with menopause symptoms.

中文對照說明

認識骨質疏鬆症

為何停經婦女會產生骨質疏鬆?

停經後的婦女體內雌激素減少,使得成骨細胞及噬骨細胞都增加。

噬骨細胞作用過程快而成骨細胞作用過程慢,致使骨質大量流失、

骨骼孔隙變大,故停經後的骨質易疏鬆。

骨質疏鬆的治療藥物

治療首重改變生活型態,包括戒菸、戒酒、運動、飲食,補充鈣質及維生素 D,若情況嚴重則搭配藥物治療:

- 1. 雙磷酸鹽類藥品:可抑制噬骨細胞作用,減少骨質被再吸收,另維生素 D3 可增加鈣質的吸收。
- 選擇性雌激素受體調節劑:效果可能較弱,適用於無法耐受 雙磷酸鹽類藥品及乳癌高風險的婦女。
- 荷爾蒙補充療法:用於預防及治療停經後的骨質疏鬆,適用 於無法耐受其他治療骨質疏鬆藥品且有更年期症狀之婦女。
- 4. 其他治療藥物:抑鈣素、副甲狀腺素、RANKL 單株抗體等

- 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.

藥品。

 多種藥物合併療法:對於額外的骨密度增加及骨折的預防, 效益不大。

結論

- 1. 更年期是婦女一生中重大的轉變時期。
- 低劑量荷爾蒙補充療法,對於改善更年期症狀、提高生活品質,是首選。
- 3. 除乳癌高危險群婦女不適合使用荷爾蒙補充療法外,一般婦女使用無礙。
- 經專科醫師審慎評估其風險及效益,使用效益最好且副作用 最低的藥物。
- 5. 預防勝於治療,規律運動、戒菸、戒酒、均衡飲食、補充足夠的鈣質及維生素 D,才是減少骨質流失,避免骨質疏鬆發生的不二法門。