抗骨質吸收藥物(anti-resorptives)的新進展

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Osteoporosis is a highly prevalent condition, characterized by compromised bone strength and fragility fractures and with an important associated socio-economic burden. According to the current understanding of opteoporosis, anti-resorptive and anabolic drugs have been developed for therapeutic intervention. Bisphosphonates are well established anti-resorptive as the first line treatment for osteoporosis. However, oral bisphosphonates are commonly associated with adverse gastrointestinal effects and both oral and parenteral bisphosphonates have been linked with osteonecrosis of the jaw and atypical femoral fracture, two rare but debilitating side effects. In addition, bisphosphonates are not recommended in patients with renal dysfunction. Hence, there is a clear requirement for newer agents, which are able to reduce fracture risk further, whilst overcoming the limitations of bisphosphonates.

Tibolone, which is indicated for the relief of climacteric symptoms and the prevention of osteoporosis in postmenopausal women, has a tissue-specific mode of action different to that of conventional hormone replacement therapy (HRT). Both tibolone, a selective tissue estrogenic activity regulator (STEAR), and raloxifene, a selective estrogen receptor modulator (SERM), are known to be used as anti-resorptives for post-menopause osteoporosis. Tibolone would be better to be prescrived to younger postmenopausal women without cerebrovascular risk factors; raloxifene would be preferred to tibolone for elderly women > 70, because of an additional positive effect of raloxifene on verbal memory and health status.

This presentation focuses on these newer anti-resorptive therapies and includes both STEAR and SERM, and may provide an overview of the mechanisms of action of these therapeutic agents on the skeleton and assess their efficacy in osteoporosisand fracture prevention. Future research is needed to address the efficacy of newer anti-resorptives in these more recently recognized conditions of skeletal fragility.