

Safety concern about bisphosphonate

Osteoporosis is defined as a systemic skeletal disorder of compromised bone strength, predisposing an individual to an increased risk of fracture. The foundation of osteoporosis prevention and treatment is a bone healthy lifestyle beginning at birth and continuing throughout life. Insuring adequate intakes of calcium and vitamin D along with other bone-healthy lifestyle practices are the first steps in prevention and treatment. Combined with adequate calcium and vitamin D intakes, bisphosphonates are the prescription medication of choice, with teriparatide, denosumab, raloxifene, and calcitonin considered alternative agents.

Mr Kenneth CHUNG, pharmacist working at Queen Elizabeth Hospital shared with us some updates on bisphosphonate in the Pharmacy Practice Forum held on 4 November at Kwong Wah Hospital. The safety of long term bisphosphonate is a topic of much debate as adverse events continue to be reported. Safety concerns with potentially severe clinical outcomes that have been reported with long-term use of bisphosphonates include atypical subtrochanteric and femoral fractures, osteonecrosis of the jaw, and esophageal cancer.

He pointed out that the data are suggestive of an increased prevalence of osteonecrosis of the jaw (ONJ) and ONJ-like findings with increased duration of exposure to oral bisphosphonates, with the highest prevalence occurring at four or more years of use. However, these results should be interpreted with caution as this study is a prevalence study and was not designed to determine whether the outcome occurred before or after initiation of therapy. With regard to the atypical subtrochanteric and femoral fractures, there is no agreement on the extent to which cumulative use of bisphosphonates increases the



risk of atypical fractures. Furthermore, the available evidence regarding the possible association between oral bisphosphonates and esophageal cancer is inconclusive. Consequently, no conclusion can be reached as to whether long-term use of bisphosphonates is associated with esophageal cancer.

The safety of long-term bisphosphonate therapy continues to be unclear as study results are conflicting as to whether or not ONJ, atypical femoral fractures or esophageal cancer are associated with use of bisphosphonates for the prevention and treatment of osteoporosis. More studies or evidence are required to support the association between the use of bisphosphonates and the abovementioned side effects.

Cindy Ng is a pharmacist working at the Queen Elizabeth Hospital

DO YOU KNOW.....? (answer)

In the meeting we discussed the appropriateness of these terms in terms of its meaning, ability to describe the current practice, the length of the term and how wildly it is used in Asia Pacific area. We have then shortlisted four options in the meeting which included “藥物修和”, “藥物協調”, “藥物理順” and “藥物整合”. After that, we voted with the score of 1-4 (4 being the best) for these four terms and concluded to use 藥物整合 as our official Chinese translation. This conclusion was then proposed in the meeting of clinical pharmacy subcommittee and to be further confirmed by Pharmacy Service Operation Management (PSOM) of HA.

Ritchie KWOK is a clinical pharmacist working at the Queen Mary Hospital