## "BREAK A LEG!" – WHY THIS PHRASE, AS WELL AS OSTEOPOROSIS, SHOULD NOT BE TAKEN LIGHTLY

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## SFP2018; 44(3): 4-5

There has been an increasing incidence of osteoporosis in the past few decades, as it affects more and more people in our modern society. Coupled with an ageing population, lifestyles becoming more sedentary, rising life expectancies as well as frailty becoming more prevalent, osteoporosis can only become a greater problem, not lesser. But is it really a problem that plagues the modern world, or has mankind been struggling with it unknowingly for much longer than that?

The answer lied with the ancient mummies that archaeologists dug up, with some estimated to be 4000 years old by carbon dating. Studies on these ancient mummies showed that they too, suffered from similar problems of osteoporosis, with bad teeth and fragility fractures. These mummies were the affluent ones who also led sedentary lifestyles without the need for manual work. Does that not sound familiar? Osteoporosis has certainly been in human history longer than most of us have realized.

In unit 1, Dr Ang Seng Bin from KK Women's and Children Hospital painted the grim facts of osteoporosis in Singapore - absolute number of people with osteoporosis will more than double by the year 2030 with a rapid increase in incidence of osteoporotic fractures, with a quarter of them dying after a fracture. Even amongst survivors, there is a substantial proportion who remain dependent and require some form of assistance in their daily living.

Not all cases of osteoporosis are due to ageing or primary in nature. In unit 2, Dr Chionh Siok Bee from National University of Singapore described how medical conditions and other causes may lead to secondary osteoporosis, how to approach these factors and addressing them adequately so as to optimize management of the osteoporotic condition.

In unit 3, Dr Chionh also described dual-energy X-ray absorptiometry (DEXA) scans being used to diagnose and monitor osteoporosis, and how to interpret such scans. This is certainly useful for us as family physicians, who will order such scans for our patients as part of osteoporosis screening and management.

In Unit 4, Dr Linsey Utami Gani gave an overview on the different pharmacological options in the management of osteoporosis, including the role of calcium and vitamin D, antiresorptive agents, hormonal therapy, and anabolic treatment options. For high- risk patients treated for osteoporosis, the BP-associated benefit of reduced fracture risk beyond 5 years is greater than the risk of developing either medication-related osteonecrosis of the jaw (MRONJ) or atypical fractures of femur (AFF). For denosumab, regular six-monthly administration is required for continued fracture risk reduction.

Unit 5 by Dr Lydia Au is on the non-pharmacological management for osteoporosis prevention. These are important

recommendations family physicians can provide to their patients. Lifestyle measures to reduce bone loss include smoking cessation, avoidance of heavy alcohol, consuming adequate calcium and vitamin D, exercise and counselling on fall prevention. The target of calcium 1000 mg and 800 international units of vitamin D daily is advised. In addition, exercises have a significant impact on falls risk reduction, but only a small effect in BMD increase. Smoking one pack per day throughout adult life was associated with a 5 to 10 percent reduction in bone density.

Unit 6 by Prof Lau Tang Ching is on the role of the family physician (FP) in osteoporosis management. Family physicians play an important role in the screening and evaluation of patients with risk factors for osteoporosis. Patient-mediated strategies that enhances health literacy, health empowerment, and self-management skills may improve osteoporosis management in the general population as the lack of time and lack of information on osteoporosis.

The selected ten readings by A/Prof Goh Lee Gan included articles on important topics: Fracture liaison services that improve osteoporosis outcomes such as re-fractures, mortality and improving patient adherence; comorbidities and medication use that are associated with increased fracture risk; osteoporosis and sarcopenia that comprise a new geriatric syndrome osteosarcopenia; effective interventions in the management of osteoporosis and fractures; and the efficacy and safety of osteoporosis medications.

For this issue of the SFP, we have one original article by Ms Fiona Devi et al and a case report by Dr Dilmini Kalambaarachchi.

With the aging population and increasing burden of chronic diseases, the Asia Pacific region will be facing an epidemic of dementia. An estimated 14.6 million people in South and Southeast Asia will be diagnosed with dementia by 2030. Family Physicians play a key role in the management of dementia that includes screening for early detection, comprehensive management of the demented patient, caregiver and family. The study by Ms Fiona Devi and co-authors explored the perceptions of FPs on barriers to care for dementia patients, reasons for referring them to tertiary hospitals for dementia-related symptoms, and the types of training and support that FPs would like to have to provide better dementia care in Singapore. The study team found that the main difficulty is the longer consultation time for a dementia patient and FPs welcome better support from a multidisciplinary care team. Interestingly, a web-based training on the management of dementia patients was the top training need identified by FPs.

Dr Dilmini's case report is on a dementia patient with behavioral and psychological symptoms of dementia causing caregiver stress. The author led a multi-disciplinary team to manage and optimize the patient's care in the community. The family physician is in a unique position to build a therapeutic relationship with the patient and her caregivers, coordinate multi-disciplinary care and harness the appropriate community resources.

We hope that these articles will bring about greater awareness and improved knowledge on the ever increasing issue of osteoporosis in our rapidly ageing population, so that our patients can benefit from better care of their osteoporotic condition, just like any other chronic diseases.