

SPK11**ROLE OF ESTROGEN IN BONE HEALTH**U. Jaisamram¹¹Dept. of Obstetrics & Gynecology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Osteoporosis, characterized by low bone mass and increased fracture risk is a common disease in postmenopausal women. This asymptomatic skeletal disease is often underdiagnosed and undertreated. A prevalence of 30% of osteopenia and 17% of osteoporosis have been reported in Thai women. Currently approved pharmacologic prevention and/or treatment options for osteoporosis include estrogen, selective estrogen-receptor modulators (SERMs), bisphosphonates, parathyroid hormone and denosumab.

Choice of treatment should be based on a balance of benefit, risk and cost. In the past two decades, an extensive body of information regarding the use of estrogens and progestogens for menopausal hormone therapy has become available. Recent evidence has led to a clear understanding of benefits and risks of menopausal hormone therapy, both on skeletal and extraskeletal systems.

Estrogen is effective in preventing bone loss associated with the menopause and decreases the incidence of all osteoporosis-related fractures, including vertebral and hip, even in patients at low risk. Menopausal hormone therapy is the only treatment available with proven efficacy of fracture reduction in patients with osteopenia. Based on updated evidence on effectiveness, cost and safety, menopausal hormone therapy is an appropriate first-line treatment in postmenopausal women presenting with an increased risk for fracture, particularly under the age of 60 years and for the prevention of bone loss in women with premature menopause.

Estrogen is the most effective agent to treat vasomotor symptoms associated with menopause. Local estrogen therapy is a preferred option for the treatment of vulvovaginal atrophy. Estrogen has beneficial effects on vascular function, cholesterol levels, glucose metabolism and blood pressure. It has been shown that menopausal hormone therapy may decrease coronary heart disease in women less than 60 years old and within 10 years of menopause.

Other potential advantages of hormone therapy include benefits for connective tissue, skin and joints, colon cancer risk reduction and a reduced risk of Alzheimer's disease.

Estrogen increases the risk of venous thromboembolism and ischemic stroke. Unopposed estrogen use induces a stimulation of the endometrium which is counteracted by progestogen supplementation. The increased risk of breast cancer in menopausal hormone users is primarily associated with the addition of a progestogen to estrogen therapy and depending on the duration of use.

SPK12**POST FRACTURE CARE PROGRAMME IN ASIA: EXPECTATIONS AND CHALLENGES**M. K. Javaid¹¹Metabolic Bone Disease, University of Oxford, Oxford, UK

A number of regional and international guidelines have been published highlighting the importance of the growing burden of fragility fractures the opportunities to address this public health emergency and the importance of secondary fracture prevention as a key healthcare service priority. Post-fracture care programmes include identification, fracture risk secondary causes assessment, treatment recommendation and monitoring to ensure treatment recommendations of initiated early and adhere to. During this presentation we will describe the evidence and share expertise for the expected standards for secondary fracture prevention we should be aiming for, current delivery in the region and the key challenges at the policy, healthcare provider and patient levels.

SPK13**ALGORITHM FOR THE MANAGEMENT OF PATIENTS AT LOW, HIGH AND VERY HIGH RISK OF OSTEOPOROTIC FRACTURES**J. A. Kanis^{1,2}, N. C. Harvey¹, E. McCloskey¹, N. Veronesi¹, M. Lorentzon¹, C. Cooper¹, R. Rizzoli¹, G. Adib¹, N. Al-Daghri¹, C. Campusano¹, M. Chandran¹, B. Dawson-Hughes¹, K. Javaid¹, F. Jiwa¹, H. Johansson¹, J. K. Lee¹, E. Liu¹, D. Messina¹, O. Mkinsi¹, D. Pinto¹, D. Prieto-Alhambra¹, K. Saag¹, W. Xia¹, L. Zakraoui¹, J.-Y. Reginster¹¹Centre for Metabolic Bone Diseases, University of Sheffield Medical School, Sheffield, UK, ²Mary McKillop Institute for Health Research, Australian Catholic University, Melbourne, Australia

The International Osteoporosis Foundation (IOF) and European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO) published guidance for the diagnosis and management of osteoporosis in 2019. The development of new anabolic interventions has widened the strategies for management, in particular, the need to identify patients at very high risk. IOF and ESCEO recommend an intervention threshold in men and women that have a 10-year fracture probability equivalent to that associated with a prior fracture in a woman of the same age with average BMI. The intervention threshold is, therefore, age dependent. Very high risk is defined as a FRAX probability that exceeds the intervention threshold by 20% or more. Overall, in women age 50 years or more from the UK, 64.8% would be categorised at low risk, 19.7% at high risk and 15.6% at very high risk. The risk categorisation of individuals deemed to merit treatment into high and very high risk, aids the targeting of anabolic therapy followed by antiresorptive medications.

SPK14**THE ROLE OF ORTHOPAEDIC SURGEON**J.-K. Lee¹¹Beacon Hospital, Petaling Jaya, Malaysia

Orthopaedic surgeons are often the first contact point for patients presenting to us with fragility fracture. As the first contact point of patients presenting with fragility fracture, orthopaedic surgeon plays the most important role in managing the fracture. However, it does not stop at the time when fracture is fixed or patient is being discharged from in-patient care. It is the golden opportunity for orthopaedic surgeon to not only treating their fractures, but treating the underlying osteoporosis or osteopenia to improve their bone density and quality in order to reduce the risk of future fractures. Many orthopaedic surgeons recognize the existence of a care gap whereby patients presenting with fragility fractures are often not evaluated or treated for osteoporosis. However, many express reservations in initiating pharmacological treatment for the underlying osteoporosis. Many are also concern about taking the responsibility to monitor the effectiveness of pharmacological treatment as well as monitoring patient's compliance and adherence to anti-osteoporosis medicines. Therefore, many orthopaedic surgeons prefer to pass over their patients to the physician to treat the underlying osteoporosis. Orthopaedic surgeon should be equipped and confident to initiate anti-osteoporosis medicine before patient is being discharged from hospital. Orthopaedic surgeons should also participate actively to ensure good compliance and adherence to the anti-osteoporosis medicine. As the surgeon managing the fracture, patient and family members are more attached and confident too in their surgeon's advice and decision on initiating the necessary long term pharmacological treatment for their osteoporosis. Orthopaedic surgeon's role is not limited to fracture fixation. Our roles should include patient education on osteoporosis and fragility fracture, appropriate and early diagnosis, fracture risk assessment using various risk assessment tools, proactively initiating pharmacological treatment of the underlying osteoporosis and monitoring the compliance and adherence to