

bilaterality) that resemble stress or insufficiency fractures of the subtrochanteric or diaphyseal part of the femur. They often occur in subjects with long-term antiresorptive therapies, but are also observed in antiresorptive drugs-naïve patients or in patients with monogenetic bone disorders, suggesting a genetic susceptibility. Other factors influence their pathogenesis, including some clinical risk factors (autoimmune disease and glucocorticoids use, Asian ethnicity), hip and lower limb geometry, and changes in bone material properties.

In this session, we will discuss:

- How to identify subtrochanteric or diaphyseal fractures of the femur which satisfy the case definition of AFF proposed by the ASBMR Task Force.
- The epidemiology of AFF in comparison to those of osteoporotic fractures prevented by antiresorptive therapy.
- How to monitor patients on long-term antiresorptive therapy for incomplete AFFs prior to fracture.
- The clinical management of patients who sustained an AFF, which is balanced by the risk of second AFF and the need to prevent future fragility fractures.
- Whether teriparatide may be of some benefit in accelerating AFF fracture healing.

MTE13

PITFALLS IN IDENTIFICATION OF VERTEBRAL FRACTURE

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Vertebral fractures are the most common osteoporotic fractures, and their consequences in morbidity and mortality are well recognized. The diagnosis of vertebral fractures is based on spine X-rays, but under diagnosis has been reported by many studies. This is explained in part by the absence of gold standard for definition of fractures and by the high number of deformities of vertebral bodies, which are not of osteoporotic origin.

Computed tomography (CT) and magnetic resonance imaging (MRI) are very sensitive and specific but have high costs, and,

in the case of CT, expose individuals to relatively high amounts of radiation. Densitometric vertebral fracture assessment (VFA) has the advantage of potentially reducing the impact of parallax effects on fracture identification with little expense and low radiation exposure.

Accurate identification of osteoporotic vertebral fractures and appropriate treatment are needed to reduce the impact of the disease on patients and on the health care system.

MTE14

MUSCLE STRENGTH/POWER ASSESSMENT AND OUTCOMES

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According to an ESCEO-EUGMS survey, 53.3% of clinicians assess muscle mass in daily practice, 54.5% muscle strength and 71.4% physical performance. However, the tools used are very different and no single tool is used by all clinicians. However, the tools and the cut-off values used by clinicians to diagnose various disorders such as sarcopenia are also heterogeneous. Interestingly, the relationship between muscle strength and physical function is influenced by level of muscle mass, the degree of obesity (e.g. BMI), age and physical activity. Therefore, these factors are to be taken into account in the evaluation of muscle strength. According to the revised European consensus on sarcopenia, muscle strength is the primary parameter of sarcopenia and is associated with adverse outcomes or physical limitation. However, it is necessary to have objective, reliable and sensitive tools to assess muscle strength, in different populations to detect and quantify weakness, and to evaluate the effects of treatment. Handgrip strength measurement may be suitable for clinical practice while the measurement of knee flexors/extensors strength with both 1RM and dynamometers is more relevant but limited by the need for special equipment.

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