In the multivariate model, the only variables associated with increased fracture risk was increasing age at scan decreased BMD total left and increased percentage body fat. All other factors did not significantly increase fracture risk in this cohort.

Conclusion: Our study suggests that many risk factors are associated with fragility fractures in those with smoking as their only risk factor; the best predictor was age at scan, BMD and gender. The percentage body fat association with increased fracture risk is quite surprising and would need further study. Percentage body fat is not currently included in the FRAX™ tool.

Disclosure of Interests: Dominic Beith: None declared, Marwan Bukhari Disclosure of Interests: Predictor Fracture (n=1663) No Fracture (n=2433) Odds ratio 95% CI
Age (years) 66.58 62.97 1.03* [1.02, 1.04] 1.00
Gender (no. of patients) Male (383) Female (1280) 0.80* [0.69, 0.90] 1.00
Female (1280) Male (469) 1.00 [0.99, 1.01] 1.00
Height (cm) 162.26 162.41 1.00 [0.99, 1.01] 1.00
Weight (kg) 71.16 71.16 1.00 [1.00, 1.01] 1.00
L1-L4 BMD (g/cm²) 1.04 1.10 0.19* [0.13, 0.26] 1.00
Femoral neck BMD (g/cm³) 0.82 0.87 0.06* [0.05, 0.12] 1.00
Total femur BMD (g/cm³) 0.87 0.92 0.10* [0.07, 0.16] 1.00
% Body fat (g) 308.15 299.89 1.00* [1.00, 1.00] 1.00

In this study, we hypothesized that slow TUG test performance would predict vertebral fracture (VF) in post-menopausal women independently of bone mineral density (BMD) and other risk factors.

Methods: This is a cross sectional study enrolled from September 2018 to December 2018. All patients with a high frequency of low trauma fracture after heart transplantation were included.

Results: 20 patients (47.6%) and low level of vitamin D (≤30μg/l) in 32 patients (76.2%) were assessed. Bone densitometry and physical performance tests (TUG) were performed in 50 patients (68.5%).

Conclusion: Systematic screening of osteoporosis seems to be useful in heart transplant patients. Osteoporosis was observed in half of these patients with a high frequency of low trauma fracture after heart transplantation, particularly in the first year.

Disclosure of Interests: None declared.


FRIO484

RESULTS OF BONE MINERAL DENSITY DURING CELIAC DISEASE: ABOUT 83 CASES

Cyriene Daloul1, Nejla El Amri1, Khadjia Baccouch1, Hela Zeglaoui1, Elyes Bouajina1, Farhat Hached Hospital, Rheumatology, Sousse, Tunisia

Background: The prevalence of osteopenia during celiac disease (CD) can range from 38% to 72%. In fact, it is a pathology that causes bone loss and is associated with a higher fracture risk compared to the general population.

Objectives: The aim of this work is to determine the frequency and factors associated with the decline in bone mineral density in adult subjects with CD.

Methods: This is a retrospective study, over a period of 4 years (from January 2014 to December 2018) and including patients followed for MC who had a measurement of bone mineral density (BMD) by DEXA.

Results: 83 patients were collected among them 12 were men (sex ratio = 0.16). The average age was 38.2 years old. The average body mass index (BMI) was 21.64 kg/m² [13.05-31.9 kg/m²]. Undernutrition (BMI <19 kg/m²) was found in 24 cases. It was associated with hypothyroidism in 5 cases, autoimmune hepatitis in 1 case and primary amenorrhoea in 2 cases. Patients had a history of fragility fracture in 5 cases and 5 patients had a history of fragility fracture in a first-degree relative.

Osteodensitometry showed low bone mass in 36 cases: osteoporosis in 23 patients (27.7%) and osteopenia in 13 cases. Osteoporosis was found in 21 patients: 1 man and 20 women. Mean femoral BMD was 0.887 g/cm³ and vertebral BMD was 0.999 g/cm³. The mean T-score at the femoral site and the vertebral site were -1.28 SD and -1.26 SD, respectively. No correlation was found between age and BMD and bone status. Comparing patients with a BMI <19 kg/m² to those with a BMI ≥19 kg/m², BMD at the vertebral site was significantly lower in malnourished subjects (p = 0.01). A significant correlation was found between BMI and vertebral BMD (p=0.000).

Conclusion: The decline in BMD was observed in third of our patients. It seems to be favored by a low BMI, which is common during CD in relation to the associated malabsorption. Thus, screening for osteoporosis should be advocated early in the course of CD.

Disclosure of Interests: None declared.


FRIO485

TIRED UP AND GO TEST FOR VERTEBRAL FRACTURE PREDICTION

Cyriene Daloul1, Nejla El Amri1, Khadjia Baccouch1, Amine Kalai2, Mohamed Amine Triri1, Hela Zeglaoui1, Elyes Bouajina1, Farhat Hached Hospital, Rheumatology, Sousse, Tunisia

Background: Sarcopenia describes the age related loss of skeletal muscular mass and function. The development of sarcopenia may confer an increased risk of falls which leads to a potential increase in fracture. The Timed Up and Go (TUG) Test is one of clinical tools used to assess sarcopenia.

Objectives: We hypothesized that slow TUG test performance would predict vertebral fracture (VF) in post-menopausal women independently of bone mineral density (BMD) and other risk factors.

Methods: This is a cross sectional study enrolled from September 2018 to December 2018, including post-menopausal women referred to rheumatology department for measure of BMD. All subjects underwent dual energy X-ray absorptiometry (DEXA) and physical performance tests.