HIGH FREQUENCY OF CLINICAL OSTEOPOROTIC FRACTURES IN A SINGLE COHORT OF 700 PATIENTS WITH SYSTEMIC SCLEROSIS.

Marília Mantovani Sampaio-Barros (Universidade de São Paulo, São Paulo, SP, Brasil), Adriana B Bortoluzzo (Insper – Instituto de Educação e Pesquisa, São Paulo, SP, Brasil), Henrique Carriço Silva (Universidade de São Paulo, São Paulo, SP, Brasil), Ana Paula Luppino-Assad (Universidade de São Paulo, São Paulo, SP, Brasil), Daniéli Castro O Andrade (Universidade de São Paulo, São Paulo, SP, Brasil), Rosa M R Pereira (Universidade de São Paulo, São Paulo, SP, Brasil), Percival Degrava Sampaio-Barros (Universidade de São Paulo, São Paulo, SP, Brasil)

BACKGROUND

There are few studies analyzing the characterization of the clinical osteoporotic fractures in patients with systemic sclerosis (SSc).

Objective. This study describes the frequency and sites of clinical osteoporotic fractures in a large cohort of SSc patients and analyzes the clinical and laboratory parameters associated with this comorbidity.

MATERIALS AND METHODS

This retrospective study analyzed the frequency of clinical osteoporotic fractures in the setting of acute pain complaint referred by 700 SSc patients attended in a single SSc outpatient clinic from 2010 to 2018. All the fractures were confirmed by radiographies. There was predominance of female gender (87.4%), white ethnicity (65.9%) and limited SSc (73.6%). Clinical, demographic and laboratory data were obtained from an electronic register database. Statistical significance was considered if p<0.05.

RESULTS

Among 700 SSc patients, 83 patients (11.9%) presented 160 clinical osteoporotic fractures, predominantly affecting vertebral (63%), intercostal joints (11%) and femoral (8%). These patients, when compared with those without clinical fractures, were older (67.72±11.94 vs. 54.12±13.69 years; p<0.01) and presented older age at onset (50.98±12.51 vs. 41.20±13.92 years; p<0.01), older age at diagnosis (53.22±13.10 vs. 43.34±14.02 years; p<0.01) and longer disease duration (16.81±9.24 vs. 12.92±9.32 years; p<0.01). Ages at menarche and at menopause were similar in both groups. OP was significantly associated with female gender (p=0.014), limited SSc subtype (p=0.049), calcinosis (p=0.007), stomach involvement (p=0.043), pulmonary hypertension (p=0.042), and cancer (p=0.016). Multivariate logistic regression showed that female gender (OR=3.296; 95%CI 0.988-10.993; p=0.052), higher age at onset (OR=1.088; 95%CI 1.064-1.114; p=0.012) and higher disease duration (OR=1.088; 95%CI 1.058-1.119; p=0.014) were associated with higher risk of fractures.

CONCLUSION

The frequency of clinical osteoporotic fractures was high in this large SSc cohort, affecting predominantly older female patients in the setting of specific clinical manifestations.