



## **MAIN COMORBIDITIES ASSOCIATED WITH OSTEOPOROSIS IN PATIENTS IN THE AMBULATORY OF OSTEOMETABOLIC DISEASES OF MANAUS UNIVERSITY HOSPITAL.**

FERNANDA MARIA DA SILVA BEZERRA (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), JULIANA BÜHRING (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), GUILHERME ANDRADE BULBOL (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), . VITORIA MIKI PANG TAKATANI (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), SAMUEL ELIAS BASUALTO DIAS (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), ANDREZZA MENDES FRANCO (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), ESTER NUNES ALMEIDA (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), CLARA PINHEIRO MARTINS (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil), SANDRA LÚCIA EUZÉBIO RIBEIRO (SERVIÇO DE REUMATOLOGIA, HOSPITAL UNIVERSITÁRIO GETÚLIO VARGAS (HUGV), FACULDADE DE MEDICINA, UNIVERSIDADE FEDERAL DE AMAZONAS (UFAM), MANAUS, AM, Brasil)

### **BACKGROUND**

Osteoporosis (OP) is a metabolic disease characterized by the deterioration of the microarchitecture and bone density, which is related to fragility and increased risk of fractures. Many chronic diseases are related to an increase in bone mass loss, which may be possible causes of secondary osteoporosis. The main comorbidities that affect bone metabolism are diabetes, thyroidopathies, inflammatory bowel disease, rheumatologic diseases, neoplasms and renal failure. The objective of this study was to analyze the comorbidities associated with patients with osteoporosis in the Rheumatology service in a university hospital.

### **MATERIALS AND METHODS**

This is a retrospective, observational, cross-sectional and descriptive study was carried out on the charts of patients with osteoporosis in follow - up at the Osteometabolic Diseases Outpatient Clinic at the Rheumatology Service of a University Hospital located in Manaus/ Amazonas. The data collected were information on coexistent diseases, which may be endocrine, rheumatologic, gastrointestinal and others.

### **RESULTS**

Among 328 patients treated with osteoporosis, were selected for the 321 study that had complete data in the medical records. The 321 medical Records were then analyzed, and the Comorbidities were divided into endocrine, gastrointestinal, rheumatologic and other diseases. Based on endocrine diseases, 45(14%) patients have diabetes, 11(3.4%) dyslipidemia, 9(2.8%) hyperthyroidism, 3(0.9%) hypothyroidism, 3(0.9%) hyperparathyroidism, 2(0.6%) goiter, 2 (0.6%) thyroid nodule and 1 (0.3%) hypogonadism. In the criterion gastrointestinal diseases, 13(4%) patients with liver disease, 4(1.2%) with intestinal disease, 4(1.2%) who underwent gastrectomy, 3 (0.9%) with gastritis and 1(0.3%) with cholelithiasis were found. In the case of rheumatologic diseases 73 (22.7%) patients with osteoarthritis, 39(12%) with rheumatoid arthritis and

2(0.6%) with systemic lupus erythematosus were found. Finally, 129(40.2%) patients have systemic arterial hypertension, 38(11.8%) pneumopathies, 25(7.8%) renal lithiasis, 13(4%) neoplasia and 4(1.2%) heart failure.

## **CONCLUSION**

In This study, we observed an important incidence of rheumatologic diseases, such as osteoarthritis and rheumatoid arthritis, which, besides being secondary causes of reduced bone mass, are factors that predispose the falls, increasing the risk of fractures, which is in accordance with the literature. The findings of systemic arterial hypertension, diabetes, pneumopathies and renal lithiasis were significant in these patients, hypertension even more than the other diseases. We did not obtain relevant numbers of patients with hypogonadism, although it is a universal risk factor. Therefore, the importance of performing laboratory tests to investigate secondary causes of reduced bone mass in patients with osteoporosis, and the correction of these causes can have a substantial impact on BMD and fracture risk.