THE EFFECT OF ANOREXIA NERVOSA ON BONE

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INTRODUCTION

One of the most common endocrine complications of anorexia nervosa (AN) is the decrease in bone mineral density. The authors evaluated the predictive factors of osteopenia and osteoporosis in AN patients admitted with low weight.

METHODS

63 ADMISSIONS IN THE ENDOCRINOLOGY WARD (from January 2001 to October 2015)

MAIN DIAGNOSIS: ANOREXIA NERVOSA

INDICATION FOR ADMISSION IN THE WARD:
VERY LOW WEIGHT (BMI < 15 Kg/m²) AND without improvement in outpatient setting

Investigation included clinical characterization, collection of blood samples (full blood count, total cholesterol, HDL-cholesterol, LDL-cholesterol, triglycerides, folate, vitamin B12, ferritin, FSH, LH, estradiol (in females), total testosterone (in males), TSH, free T3 (FT3), free T4 (FT4)) and a bone densitometry immediately after admission.

BMD was considered both as a continuous (T-score) or as a discrete variable (according to WHO criteria as normal, osteopenia or osteoporosis). The relationship between clinical and analytical parameters and bone density was evaluated.

RESULTS

CONCLUSION

In this group of patients, low weight on admission was associated with osteopenia and osteoporosis. Initial weight was positively correlated with better results of densitometry in lumbar spine and total femur. The greater number of correlations with lumbar spine bone loss is in agreement with the earlier changes in the trabecular bone described in the literature. The low number of patients with normal densitometry (n=5) may have limited the association with other factors, as well as the statistic strength of the presented results.