



REDUCED BONE MINERAL DENSITY IN CHILDREN WITH INFLAMMATORY BOWEL DISEASE WITHOUT EXPOSURE TO CORTICOSTEROID TREATMENT

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INTRODUCTION

Bone mineral density is reduced in children and adolescents with inflammatory bowel disease (IBD). Sometimes The exact cause of this reduction is not known and is often attributed to corticosteroid use.

AIM

The aim of the study was to evaluate bone mineral density in children with IBD without previous corticosteroid exposure.

METHODS

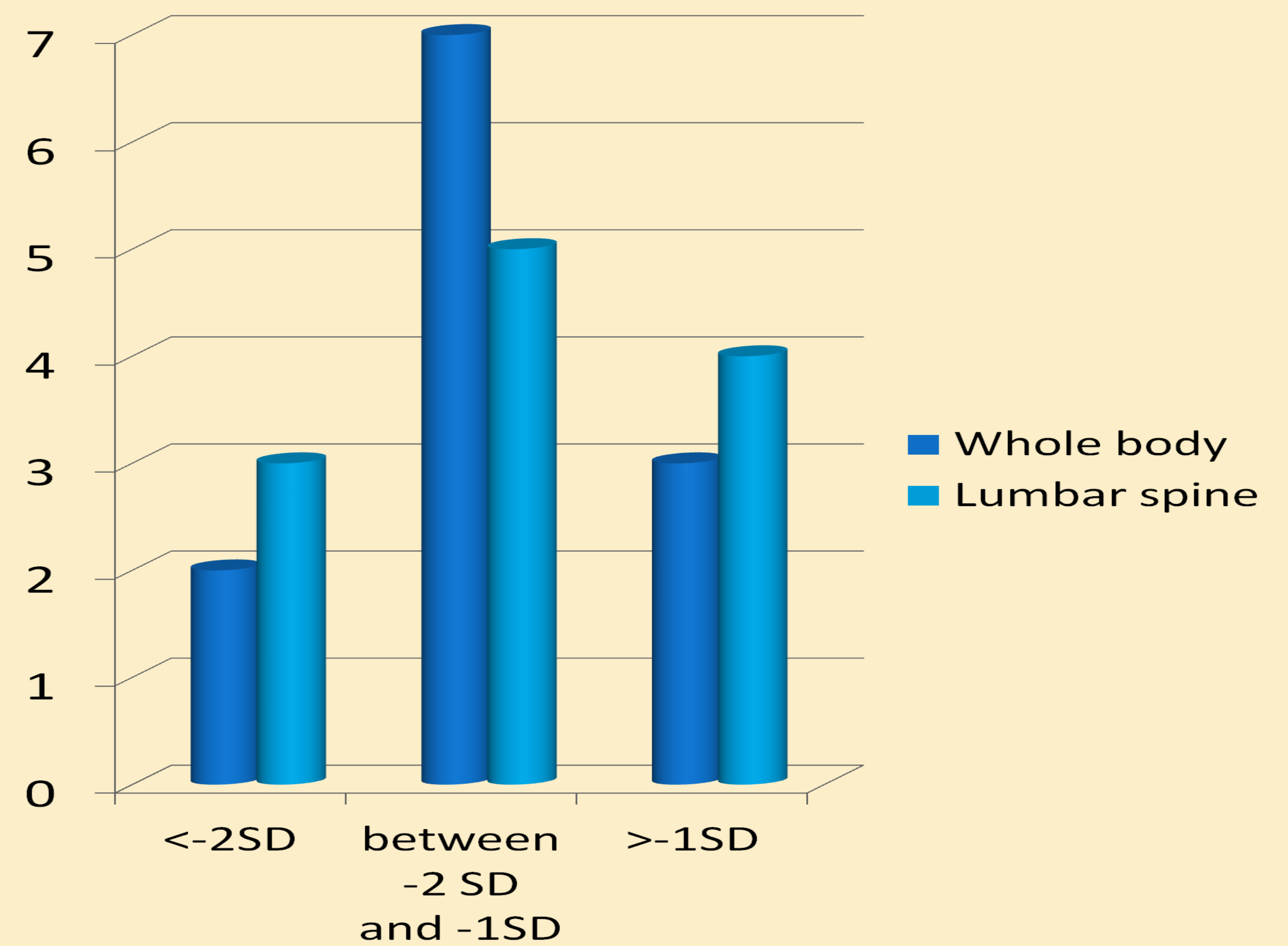
Twelve children aged 8-17years with IBD (8 WITH Crohn's disease and 4 with ulcerative colitis) underwent dual energy x-ray absorptiometry (DEXA). Data on growth and pubertal development, disease activity and calcium metabolism were recorded. Bone mass measurements were performed and z-scores were adjusted for bone age.

CONCLUSIONS

A reduction of bone mineral density is common in children and adolescents with IBD. The inflammatory disease contributes to impaired bone mass and delayed puberty may constitute one of the mechanisms.

RESULTS

Four of the 12 patients (33.3%) had lumbar spine bone mineral density z score less than -1 (three had a z score less than -2). The same percentage (33.3%) of children had total bone mineral density z scores less than -1 (two had z score less than -2). The subjects with IBD had significantly reduced mean lumbar spine bone mineral density z-scores (P = 0.01) and most of them had delayed puberty. 40% of children had 25OHvitD levels ≤ 20ng/ml . There was not any association between bone density and children's auxological data or 25OHvitD levels.



REFERENCES

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2. Wael El-Matary et al, Bone mineral density, vitamin D, and disease activity in children newly diagnosed with inflammatory bowel disease. Dig Dis Sci 2011 Mar;56(3):825-9