our study, conducted in a large population of children and adolescents with cow's milk allergy [6], the contribution of a milk-free diet to the high fracture risk really seems modest.

We thank Monti and colleagues for highlighting the complexity of this clinical problem in pediatrics, but we venture to suggest caution, even if this interesting case seems obvious. Indeed, since the mechanism responsible for bone fragility in cow's milk allergy is not known, a 'blanket' recommendation for calcium supplementation in these children is not evidence-based.

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Reply

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We thank Dr. Konstantynowicz and Dr. Motkowski for their pertinent comments on our report and for the improvement of our references on low milk intake and fractures rates.

We completely agree with our Polish colleagues about the possibility that in our child both cow's milk allergy itself and the long-term deprivation of dairy products may have contributed to affect skeletal status and that it is difficult to define which factor contributed most. We have not observed any malabsorption of vitamin D or any micronutrient deficiency due to chronic diarrhea in our patient as his serum biochemical and hormonal values were normal. Protein intake was adequate as protein sources as an alternative to milk were granted (i.e. meat, eggs) and no sign of hypoproteinemia was observed.

We do not know what the exact dietary calcium intake should be for our child to satisfy his nutritional needs and data from the literature are scanty. Nevertheless we believe that the RDI should be appropriate [1, 2]. Furthermore, it should be underlined that calcium supplementation of 1 g/day during the first 6 months and 500 mg/day later, with contemporary increased physical activity, led to an evident improvement in bone health (no more fractures) and growth.

All the fractures reported in our case resulted from slight trauma and no other

risk factor for pathologic fractures was found. The screening for celiac disease proved negative and rare metabolic disorders were excluded by history (familial history negative for fractures and bone or connective tissue disorders) and clinical, laboratory and radiological findings. Genetic investigation on osteogenesis imperfecta was not carried out because the boy did not show clinical symptoms consistent with that disease.

We could also hypothesize that the prolonged use of systemic steroids in some periods of our boy's life might have affected skeletal growth, but this would be surprising as his height was not affected and no other clinical or laboratory findings of steroid abuse were observed.

Absolute values for BMD were compared with those of age- and sex-matched control groups giving results similar to the z score. It is well known that densitometric BMD evaluation is not directly related to fracture risk, nevertheless in our patient both the DXA and ultrasound showed increased density during the follow-up; if the DXA increase is also explained by growth spurt, this might not be the case for ultrasound [3].

Finally, in our opinion, the lack of fractures during the 3-year follow-up shows that increased bone strength was achieved together with increased density.

We truly believe that careful nutritional follow-up is strongly needed in children with food allergies undergoing an elimination diet. In particular it is necessary to verify calcium intake in case of cow's milk avoidance, in order to provide appropriate supplementation if any deficiency is observed.

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