

Slipped upper femoral epiphysis: Outcome after *in situ* fixation and capital realignment technique

Sir,

We read the article “slipped upper femoral epiphysis (SUFE): outcome after *in situ* fixation and capital realignment technique” with interest.¹ This study is first of its kind where the outcome of SUFE has been evaluated in Indian children. The authors also found the association of high body mass index, vitamin D deficiency and endocrine disorders in SUFE children. However, we have few concerns about the results of the study.

The authors found mean vitamin D level to be 12.61 ± 5.4 ng/ml with a range from 3.76 to 25.6 ng/ml. There were 20 out of 21 children who were severely vitamin D deficient, but no rachitic changes were evident. As per recent recommendations, in children and adolescents, vitamin D level above 20 ng/ml is considered as sufficient, 15-20 ng/ml as insufficiency, <15 ng/ml as deficient and <5 ng/ml as severely deficient.² With the mean value of 12.61 and standard deviation of 5.4, how could it be possible that 20 out of 21 children were severely vitamin D deficient? Vitamin D deficiency is widespread in India in all age groups. In one study, the mean serum concentration of 25(OH) D among North Indian children was found to be 11.8 ± 7.2 ng/ml (below the average value of the present study).³ The study by Marwaha *et al.*⁴ has shown that adolescents in Delhi from upper and lower socioeconomic groups had mean serum 25(OH) D concentration of 31 nmol/L (equivalent to 12.4 ng/ml). They also found that despite supplementation with 60,000 IU of vitamin D3 (monthly 2000 IU/day or 2 monthly 1000 IU/day), only 47% subjects were vitamin D sufficient at the end of 1 year (mean 25[OH] D level 50.1 nmol/L). We feel that measurement of vitamin D level in healthy children or adolescent (control group) would have better clarified the association of vitamin D deficiency in SUFE. With wide prevalence of vitamin D deficiency in India even in healthy children, is this association of vitamin D deficiency and SUFE a new conception?

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