

عنوان مقاله:

Serum vitamin D levels in girls with central precocious puberty

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خلاصه مقاله:

Precocious puberty can cause several adverse effects on final growth and social behavior in girls. Recent studies showed that low serum level of vitamin D might be associated with precocious puberty. The aim of this research was to investigate the association between serum vitamin D level and central precocious puberty in girls. Girls with central precocious puberty under the age of eight were enrolled in the study. Subjects with brain tumor, inherent adrenal hyperplasia, or thyroid dysfunction were excluded from the study. Age, weight, height, serum level of vitamin D, luteinizing hormone (LH), follicle-stimulating hormone (FSH), estradiol, free thyroxin (FT₄), bone age, thyroid-stimulating hormone (TSH), and Tanner stages were determined for all the subjects. Healthy girls with no precocious puberty were considered as the control group. Finally, 58 girls (28 with central precocious puberty and 30 healthy) were included in the study. The average levels of serum vitamin D were 12.9 ± 7.8 ng/mL and 15.2 ± 5.9 ng/mL in the case and control groups, respectively ($P = 0.02$). We found that 37% of girls with precocious puberty were in Tanner stage 2 and 63% in stage 3. The serum vitamin D level had considerable relationship with chronological-bone age difference ($P < 0.01$). Vitamin D deficiency was more common in girls with central precocious puberty than those with normal sexual maturation. Insufficiency and deficiency of vitamin D were more common in girls who were evaluated in this study in comparison with other studies.

کلمات کلیدی:

Vitamin D, precocious puberty, bone age

