PARATHYROID ADENOMA SHOULD BE CONSIDERED IN THE MANAGEMENT OF HYPOPHOSPHATEMIC RICKETS

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X-linked dominant hypophosphatemic rickets (XLHR) is a rare hereditary metabolic bone disorder. Calcitriol and phosphates are used for the treatment and hyperparathyroidism rarely occurs as a complication. We report a case of XLHR who developed autonomous parathyroid hyperfunction during treatment and underwent surgery for that.

Case:
A male patient was presented with short stature and bone deformities at age 11 months and diagnosed with XLHR based on clinical and laboratory findings. The initial laboratory investigation results were as follows: Serum calcium: 9.6 mg/dl, phosphate: 2.8 mg/dl, alkaline phosphatase: 200 U/L, tubular phosphate resorption: 80%. 25-OH-vitamin D level was normal. Calcitriol and phosphate treatment was started. On follow-up, at the age of 13 years, his height was 151.4 cm (3-10p), weight 55 kg (50p) and physical examination findings were normal. On laboratory, serum calcium 12 mg/dl, P: 3.6 mg/dl, ALP: 180 U/L and parathormone: 588pg/ml (5-65). Tc 99m sestamibi scanning showed 1.5x1 cm sized parathyroid adenoma at the right upper gland. Parathormone and calcium levels returned to normal after the excision of the adenoma.

Conclusion:
Autonomous parathyroid hyperfunction and hyperplasia is a rare but treatable complication of hypophosphatemic rickets. Although there is no concensus on phosphate dosage during the treatment, careful evaluation of phosphocalcic panel during treatment is important for the prevention, early diagnosis and intervention of parathyroid hyperplasia.