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Objective:

According to the etiology of hyperparathyroidism, it is divided into primary and secondary (uremic). Primary hyperparathyroidism is usually middle-age and late-age disease and bimodal manifestation occurs in children. It usually develops due to CaSR mutation during the infancy period. On the other hand, it usually emerges secondary to a parathyroid adenoma in adolescents. Secondary hyperparathyroidism occurs by stimulation of the parathyroid gland by external factors. Herein, we present 8 patients with primary and secondary hyperparathyroidism.

Case:

Eight children with hyperparathyroidism who have been treated during the last 2 years have been evaluated. The reasons for referral, hormonal and biochemical results and the applied therapies were evaluated. The M/F ratio was 3/5, and the range of the patients' age was 8-15 years. One of the 3 symptomatic patients had abdominal pain, the other had anorexia and the other had pain in achilles tendone. Three of the cases had secondary hyperparathyroidism due to treatment of hypophosphatemic rickets. The other five were sporadic. None of them had family history or MEN-related clinical findings. All patients had localized adenomas and six of them underwent surgery. The pathological evaluations were compatible with the adenoma.

Case	Age of diagnosis /gender	Symptom	Treatment		Ca before treatment (mg/dl)	P before treatment (mg/dl)	PTH before treatment (pg/ml)	Radiology		Nefro calsin	Local/size
			surgery	cinecalse t				USG	MIBI		
1	12.5/F	Asymp. (giant cell lesion), aneurysmal bone ksitis?, Brown tm?)	+	-	13.83	2.45	187.9	-	+	-	Upper left lobe 2 cm
2	12.2/M	Abdominal pain	+	-	12.7	4.1	121	+	+	-	Lower right lobe
3	13.5/F	Asymp.	-	+	12.32	3.66	180.6	-	+	-	Lower right lobe
4	8/M	Asymp.	-	-	9.2		223	+	+	-	Lower left lobe 8.3X3.3 mm
5	14.2/M	Asymptomatic	+	-	11.91	2.85	89.5	+	+	-	Upper right lobe
	15	Asymptomatic	-	+	9.5	2.06	219.3	-	+	-	Upper left lobe
6	9.5/F	Asymptomatic	+	+	10.9	2.8	279.9	+	+	+	Lower left lobe
7	11.16/F	Nausea, anorexia, leg pain, renal stone	+	-	13.7	3.2	195.7	+	-	+	In both lobes on the left
8	16/M	Pain behind the ankle (achilles tendone)	+	-	14.4	2.4	512	+	+	-	Lower left lobe/big size

F: female; M: Male; Asymp.:Asymptomatic; Ca: calcium; P: Phosphate USG: ultrasonography; MIBI: scintigraphy with 99mTc-sestamibi

Conclusion

Parathyroid gland disease is a rare condition in children, which usually presents with primary hyperparathyroidism due to a parathyroid adenoma as in our cases. We aimed to draw attention to this rare disease by sharing the experience of our clinic.