ADULT IATROGENIC HYPOPARATHYROIDISM THERAPY: BETWEEN LESS AND MORE

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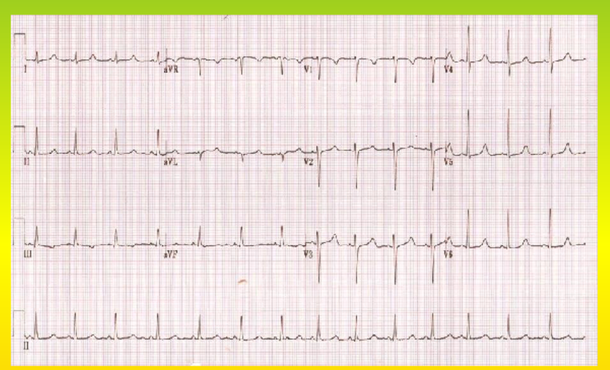
Introduction

The hypoparathyroidism (HypoPT) represents a rare condition characterized by low calcium (Ca) and parathyroid hormone (PTH) levels, frequently due to thyroid surgery by direct trauma of the parathyroid glands, devascularization, or their accidental removal. Postoperative hypoparathyroidism-related hypocalcemia may be permanent or transient.
point anomalies of the vessels as coronary artery or abdominal aorta.

Material & Methods

The endocrine tests results are presented.



Prolonged QT interval

Date	Parameter	Value	Normal Range	Treatment Regimen
09. 2015	Serum Total Calcium	6.9	8.5- 10.1 mg/dl	1800 mg Calcium 1200 IU vit D3 0,5 mcg AlphaCalcidol
	Ionized Calcium	1	1.0-1.3 mmol/l	
	Intact PTH	7,5	15.0- 65.0 pg/ml	
	Magnesium	1,85	1.8-2.4 mg/dl	
10. 2015	Serum Total Calcium	7.8	8.5-10.1 mg/dl	3000 mg Calcium 2000 IU vit D3 1.5mcg AlphaCalcidol
	Ionized Calcium	1,09	1.0-1.3 mmol/l	
	Intact PTH	5,5	15.0-65.0pg/ml	
01. 2016	Serum Total Calcium	6.8	8.5- 10.1mg/dl	3000mg Calcium 2000 IU vit D3 2mcg AlphaCalcidol
	Ionized Calcium	1	1.0-1.3mmol/l	
	Intact PTH	4,9	15.0-65.0pg/ml	
	24-hour urine Calcium	35	42-353	
04. 2016	Serum Total Calcium	7.7	8.5-10.1mg/ml	3800 mg Calcium 1200IU vit D3 1,5 mcg AlphaCalcidol
	Ionized Calcium	1,03	1.0-1.3	

Results

We report the case of a 64 year-old man presenting with severe symptoms of hypocalcemia (muscle cramps, tingling, burning in the fingertips, toes, and lips, muscle spasms, especially around the mouth, fatigue), 2 weeks after total thyroidectomy for nodular goiter, despite undergoing treatment with daily 1800 mg Calcium and 1200 IU vitamin D3 (cholecalciferol). Laboratory tests showed low ionized serum calcium (1mmol/L; N:1.06-1.2mmol/L), low albumin adjusted total calcium (6.9mg/d; N:8.8-10.2mg/d), low PTH (7.5pg/mL; N:15-65pg/ml). The histopathological exam confirmed the removal of one parathyroid gland. HipoPT was confirmed and vitamin D/calcium supplements were adjusted: active vitamin D analogues (Alfacalcidol 2 mcg/day), calcium supplements (3000 mg/day) and cholecalciferol (2000 IU/day). 5 months later, the patient reported a clinical improvement despite persistent low serum and 24-h urinary calcium levels (as well as PTH). Depression, possibly due to chronic hypocalcemia, was diagnosed and psychiatric treatment was initiated. In addition, abdominal ultrasound found renal sludge, which warranted careful monitoring during treatment with calcium supplement and adequate liquids intake recommendations. Follow-up during therapy is necessary (Alfacalcidol 1 mcg/day given its potent inhibitory effect on PTH levels), calcium intake 3500 mg/day, together with cholecalciferol 1200 IU/day).

Conclusion

Treatment of HypoPT might be challenging due to doses of calcium in high doses of vitamin D and calcium to obtain clinical and biochemical control while avoiding the negative effects of calcium excess deposits. In this context, patient's well-being and quality of life may also be difficult goals to achieve.