INTRODUCTION

Post-surgical hypoparathyroidism is a well known complication of total thyroidectomy. It may occur as transitory hypoparathyroidism that spontaneously recover within a few weeks/months and as permanent hypoparathyroidism needing long-term treatment.

- Only few cases of hypoparathyroidism newly diagnosed many years after surgery have been reported.
- We present a patient with hypoparathyroidism that became clinically evident 15 years after the thyroid surgery.

1998

- 18-year-old female, submitted to total thyroidectomy for papillary thyroid carcinoma (pT2N1bM0) at another institution.
- She might have done radioiodine ablation therapy (we do not know the dose neither post-therapy scan).

2009

- She was referred to Endocrinology consultation in September/09 for follow-up.
- No evidence of recurrence, so far, and the patient remained clinically asymptomatic.

2012

- In March/12 she was observed in the Emergency Department due to complaints of hand paresthesias and carpal spasm.
- Severe hypocaemia was diagnosed:
  \[ \text{Ca} = 5.4 \text{mg/dL [8.8;10.6], Ca}^2+ = 0.68 \text{mg/dL [1.15; 1.35]} \]
- She was treated with i.v. calcium gluconate and after resolution of signs and symptoms was discharged on calcitriol, calcium carbonate and cholecalciferol therapy.

- Due to constipation, she abandoned by her own initiative calcitriol a month later.

2013

- In May/12 the analytical study of calcium metabolism revealed postsurgical hypoparathyroidism, normal renal function and vitamin D
  \[ \text{PTH} = 10.2 \text{pg/mL [10;65]}, \text{Ca} = 4.1 \text{mg/dL [4.2-5.1], Ca}^2+ = 2.04 \text{mmol/L [2.26-2.64]}, \text{PO4}^3- = 4.6 \text{mg/dL [2.7-4.5], Mg}^2+ = 1.50 \text{mEq/L [1.55;2.05]} \]
- The patient is now asymptomatic on supplementation with calcitriol, calcium and cholecalciferol.

CONCLUSION

- Late-onset hypoparathyroidism appearing years after total thyroidectomy is a rare condition.
- Symptoms of hypocalcaemia may be latent and subtle (such as weakness, tiredness, irritability and depression) and thus attributed to other diseases.
- Although hypocalcaemia typically occur after surgery, progressive atrophy of the parathyroid glands, leading to its insufficiency years after thyroid surgery, may result in a late latent hypocalcaemia.
- Although we lack data on radioactive iodine (I\textsubscript{131}) therapy and she is not able to ensure us that information, it is another possible factor contributing to late hypoparathyroidism.

REFERENCES:

1) Hafsah Al-Azem et al, Hypoparathyroidism, Endocrinology & Metabolism, volume 26 (4), 2012, 517-522
2) JP Bilezikian et al, Hypoparathyroidism in the Adult: Epidemiology, Diagnosis, Pathophysiology, Target Organ Involvement, Treatment, and Challenges for Future Research, J Bone Miner Res 26 (10), 2011, 2317-2337
3) R Kelly and H Taggart, Hypoparathyroidism—presenting 40 years after thyroid surgery, UMI 67(1) 1998, 63-64