**INTRODUCTION**

Prolonged evolution of an untreated hypothyroidism can lead to thyrotropic cell hyperplasia, which could be indistinguishable from a pituitary macroadenoma on resonance. Differential diagnosis is very important since it allows to avoid aggressive therapeutic behaviors.

**AIM**

To spread the knowledge of thyrotropic cell hyperplasia pathology

**METHOD**

We show a case report about thyrotropic cell hyperplasia secondary to prolonged uncontrolled primary hypothyroidism

**RESULTS**

We show a 3-year-old girl who, in the context of a study due to psychomotor retardation, borderline head circumference and coarse features. She had insomnia, but no fatigue, visual disturbances, or headache. Parents had not noticed growth disturbance. She received laxatives for constipation. Her mother had two abortions and his uncle has type 1 diabetes. She showed microcephaly from 20 weeks of pregnancy with karyotype and aneuploidies in amniotic fluid normal, and magnetic resonance imaging and brain ultrasound at birth normal. No heel test was performed. Anthropometry at birth was normal.

On examination she had a short stature (2.75 SD), wide forehead and nose, and hypertelorism. She started treatment with levothyroxine 50 mcg / day, with normalization of TSH and T4 in 2 months. Parents referred since levothyroxine treatment she slept well, did not need laxatives, and psychomotor development had greatly improved. As for the stature, she showed -1.82 SD and growth velocity with p-99 (5.17-6.03 SD) at one year of treatment.

Enlarged adenohypophysis (10.8mm) and bent, which compresses neurohypophysis

**CONCLUSIONS**

In conclusion, this case recalls the importance of a baseline study of all hormonal axes in any tumor of selar origin that excludes non-surgical causes.

**REFERENCES**


