INTRODUCTION

- The reversibility of idiopathic hypogonadotropic hypogonadism (IHH) is well documented and may result in spontaneous fertility (SF) in 10% of the cases.
- These facts are little discussed in anterior pituitary insufficiency.
- We describe a case report of this disease with SF after androgen therapy withdrawal.

CASE REPORT

Reference due to Short stature.

Identification:

PJON, J, DB 22.03.1981
Age: 7 years-old

Auxology:

Height 108 cm (-2.86 SD)
Predicted Adult Stature (PAS) 169.5 cm (-0.78 SD)
Bone age 6 years (-2.82 SD)
Growth velocity 2 cm

Past history of traumatic delivery; irrelevant familial history.

Cranial CT: intrasellar arachnoidalcele.

Set/1990

9 y and 6m
Starts GH 12 U/weekly
L-T4 100 μg/day

Jan/2001

19 years old
STOPS SOMATROPIN

Height 180.9 cm (0.93 SDS) – exceeded PAS
Tanner P2 G4, VT 10-15 mL
R: Levothyroxine 125 μg/day
Testost.enant. 250 mg 3/3 weeks
Hidrocortisone 20 mg SOS

May/2011

30 y
STOPS TESTOSTERONE ENANTHATE
with intention to become a father

FSH 1.8 mU/mL (<15)
LH 3.3 mU/mL (<9.0)
Total testosterone 1.7 ng/mL (2.7-11.0)
TSH 1.1 mU/mL (0.4-4.0)
FT4 1.0 ng/dL (0.8-1.9)
ACTH 30 pg/mL (9-52)
Cortisol 5.8 μg/dL (5-25)
Sperogram Asthenozoospermia

Sept/2011

30 y
Erectile disfunction, decreased libido and fatigue.

FSH 2.8 mU/mL (<15)
LH 2.0 mU/mL (<9.0)
Total testosterone 1.3 ng/mL (2.7-11.0)

He restarted testosterone enanthate

Dec/2011

2014
30 y
His child was born.
He’s clinically stable; Father of a 2-years-old child, with normal psychomotor development.

DISCUSSION

- Reversibility of hypogonadism and spontaneous fertility (SF) chance should be considered in all patients with IHH and anterior pituitary insufficiency.
- If the patient desires to become a father, testosterone should be suspended, and endocrinological reassessment and sperogram should be done. Reversibility of the hypogonadism and/or SF can be observed; if it doesn’t it should be performed fertility induction.
- It is known that the patients who will probably present SF are those with post-puberty hypogonadism; partial hypogonadism – TSH, LH, inhibit B and testosterone not very low; absence of cryptorchidism; and previous treatment with gonadotropins.
- In this case, we admit that testosterone enanthate withdrawal has contributed to a partial reactivation of the hypothalamic-pituitary-gonadal axis, sufficient to stimulate spermatogenesis. A TV of 6 mL at age of 12 (and 10-15 mL after puberty induction) can be a predictor of greater chances of SF (it indicates some endogenous gonadotropin production).