

About a case of Leydig cell tumor associated with central precocious puberty M.Bensalah, Y.Aribi, M.Iabassen, S.Ould kablia Endocrinology unit .Central Hospital of Army .Algiers .Algeria



Background:

Leydig cell tumor (LCT) is a rare testicular tumor developing from male gonadal interstitium and most common type of testicular sex cord-stromal tumor. Its incidence is about 1%-3% of all testicular neoplasms. In children only few cases had been reported and are associated with pseudo puberty.





<u>Case report:</u>

We report a case of a 4 years old boy admitted to our unit for management of precocious puberty which started one year ago with increase in penis length and pubic hear.

At four years his height was 130cm (+35D5) weight 28 Kg (+3SDS) ,he has no dysmorphic face, acne and hoarse voice.

Genital examination found a G3P2 Tanner stage with right testis volume of 6cc and left of 3cc.



Figure 1:Genital aspect

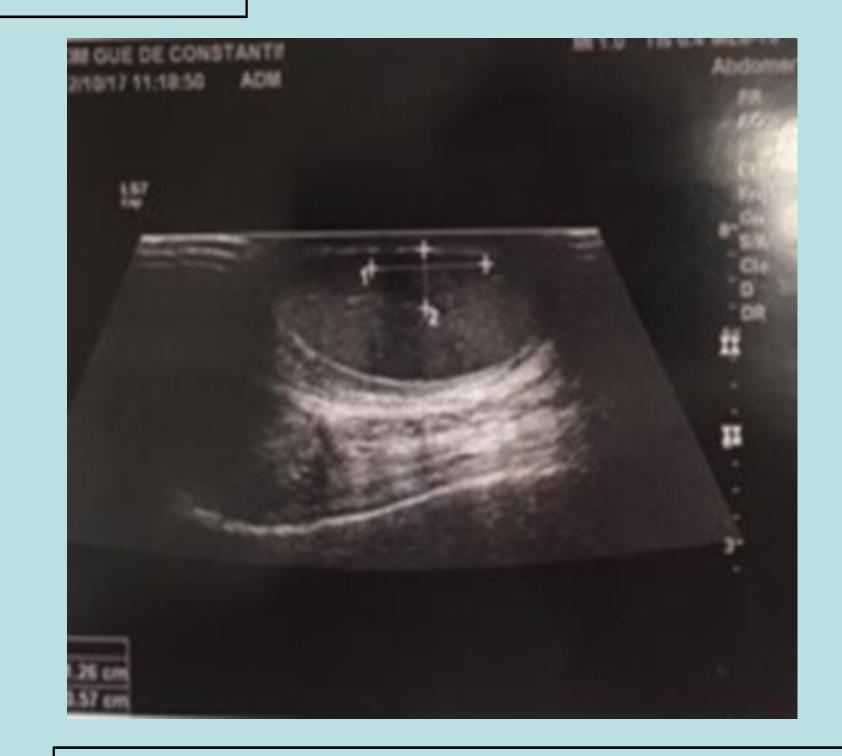


Figure 3: Testicular ultasound Imaging

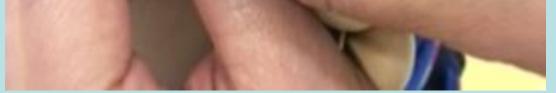


Figure 2 : increase testicular volume

Hormonal assay showed luteinizing hormone (LH) levels at 0, 5 U/I; normal human chorionic gonadotropin level <1 m IU/ml; alpha-fetoprotein (AFP) level at 0.76 IU/ml; serum testosterone at 1.9 ng/ml; 170HP at 1,04ng/ml. TSH at 2,4µUI/ml, FT4 at 12 pg/ml.

Testicular ultrasound found an hypo echogenic lesion of 12,5x6 mm in the right testis with irregular limits.

MIR confirm the nodule of 15x6mm which appear in isosinal T2 and enhanced gadolinium. **Conclusion:** The patient underwent right orchiectomy This case report a rare testicular tumor (LCT) revealed by precocious pseudo puberty followed by Histological section show polygonal cells with central puberty with priming phenomena . This abundant eosinophilic cytoplasm and prominent underlines the interest of a rigorous follow-up after nucleoli arranged in sheets and nodular pattern tumor resection. corresponding to LCT.

Follow up:

One and three months later, we note the persistence of signs of precocious puberty with morning erection and increase of left testis volume to 6cc .LH level was 2,58 U/L and testosterone 2,85ng/ml confirming central puberty .Hypothalamic-pituitary MIR was normal .Precocious puberty with" priming phenomena" due to long term testosterone secretion by the LCT has been evoked .The patients was treated with LH-RH analogues (TRIPTORELINE 3,75mg) every 28 days which induce good evolution with decrease of testicular volume and testosterone levels (0,12ng/ml).

Bibliography:

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Sex differentiation, gonads and gynaecology or sex endocrinology

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