

A 45X0/46XY Girl Diagnosed with Prepubertal FSH Elevation

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Aim:

The 45,X/46,XY karyotype is rare (1/15.000)

- It represents from Turner females to phenotypically normal males with varying degrees of genital ambiguity.
- Although, high gonadotropin levels have been described in 0-5 years old girls with Turner syndrome, high FSH level is not well known finding in prepubertal girls older than 6 years.

Case:

- A 6 y 8 m girl presented with lipomastia
- She was born 3720 gr via section and her background was normal

Physical examination:

Height: 116.4 cm (-0.57 SD)

Weight: 26.8 kg (+1.17 SD)

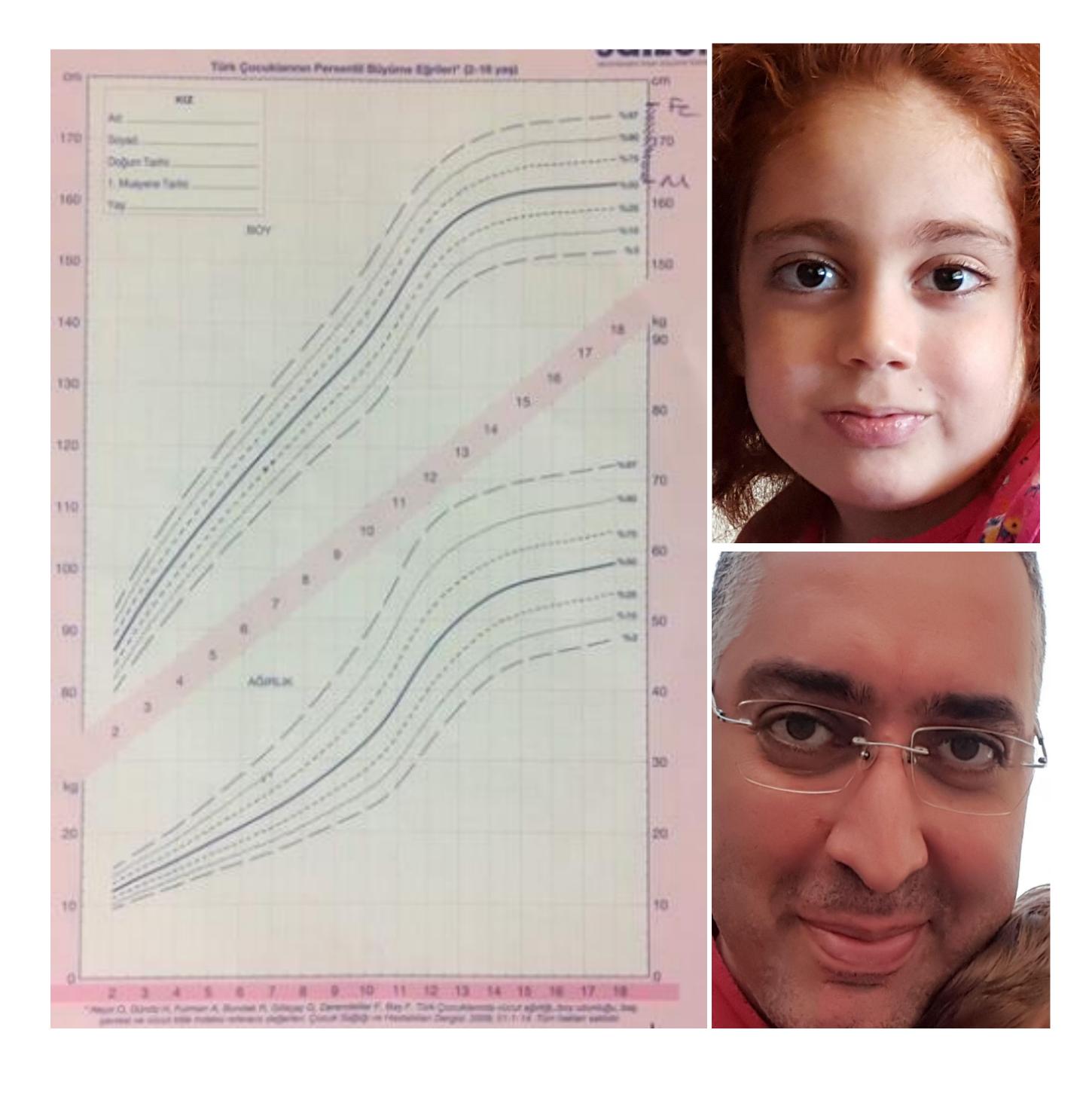
BMI: $19.7 \text{ kg/m}^2 (+1.73 \text{ SD}) (95.6 \text{ p})$

MPH: 170 cm (+1.05 SD)

BP: 110/70 mmHg,

Prominent eyes, prolonged palpebral fissur

Other systems were normal, Breast 1 (lipomastia), Pb 1



CA: $6^{8/12}$ **PAH**: 154.9 - 148.8 cm

BA: 6 ^{10/12} - 7 ^{10/12} **MPH**: 170 cm

- FSH: 16.7 mIU/mL - Pelvic USG: Uterus 29x5x10 mm

- LH: <0.1 mIU/mL RO 13x4x7 mm

 $-E_2$: <5 pg/mL LO 10x5x6 mm

- TSH: 2.5 IU/mL

- fT4: 1.57 ng/dL

- Karyotype: 45X0/46XY (22/82) FSH: 10 mIU/mL

- Buccal mucoza: 45X0/46XY (82/18) FSH: 8.2 mIU/mL

- ECHO and Urinary USG were normal

- No hearing loss

- Glucose: 82 mg/dl, insulin: 7.8 μIU/mL, HbA1c: %5

- AST:25 U/L, ALT: 14 U/L, tissueTransgl IgA negative,

- Normal Lipids

- Negative Anti-TPO

- IGF1: 144 ng/mL, DHEAS: 99 μg/dL (2.8-85)

Conclusion:

Despite of normal height, Turner syndrome should be suspected in the presence of

- Prepubertal FSH elevation or

- Lower height SDS than MPH SDS

Elevated FSH level expects in 0-5 years old children with 45X0 Turner syndrome, but it can be also seen in prepubertal girls.









