

P2-847 Late presenting girls with Turner Syndrome can achieve a normal final height.

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Background:

- The diagnosis of Turner Syndrome (TS) must be included in the differential diagnosis of all girls with short stature.
- Despite overall earlier diagnosis and treatment there still remain patients with TS who present late with delayed puberty.
- Although growth hormone (GH) is known to increase final height (FH) in girls with TS, little evidence exists on treatment in late-presenting girls.

Objective

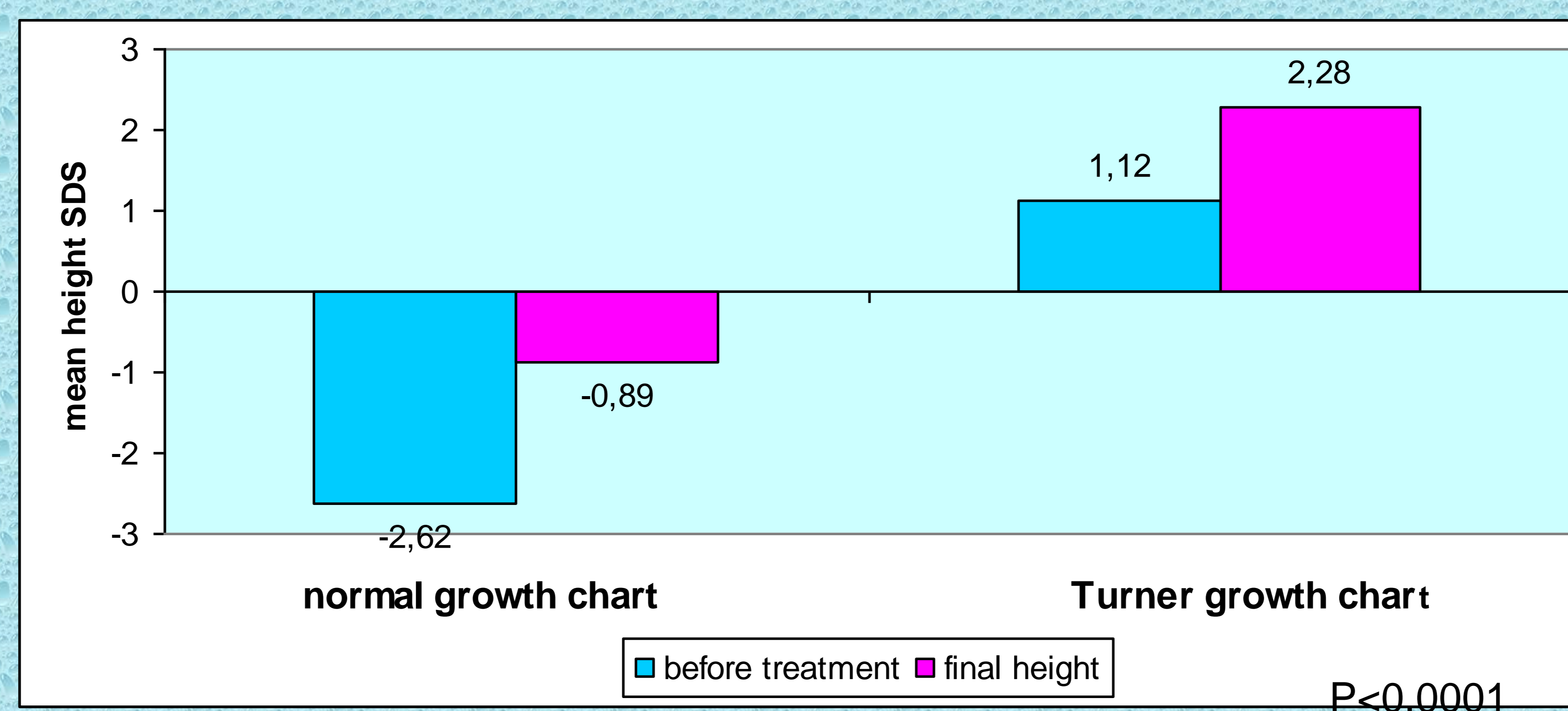
- To assess the effect of late GH treatment along with delayed pubertal induction on FH of girls with TS.

Study Population and Methods

- 13 girls with TS presenting after 12 years of age due to delayed puberty were studied.
- Standard GH treatment was initiated immediately after diagnosis (starting dose 40mcg/kg/d).
- 8/13 were also started on the anabolic steroid oxandrolone at the same time.
- FH was calculated when the height velocity was ≤ 2 cm/year.

Results

	Minimum	Maximum	Mean	Std. Deviation
age at initiation of GH (years)	11.92	16.92	14.37	1.72
age at initiation of oestrogen (years)	13.08	17.50	15.21	1.31
Δ age GH to oestrogen initiation (years)	-0.50	1.75	0.70	0.62
Final height (cm)	151.2	165	156.9	4.2



- The FH range was 151.2-165 cm ie. within the normal range for girls without TS.
- There was no statistically significant difference in FH-SDS between those patients who received oxandrolone and those who did not.

Conclusion

We have shown that despite late GH treatment in girls with TS presenting with delayed puberty, a normal FH can be achieved. Previous studies have shown that late pubertal induction, as well as oxandrolone treatment, improve FH (1,2), factors that seem to have had a positive effect in our patients.

Literature

1. **Effect of oxandrolone and timing of pubertal induction on final height in Turner's syndrome: randomised, double blind, placebo controlled trial** EJ Gault, R Perry, T Cole, S Casey, W Paterson, P Hindmarsh, P Betts, D Dunger, M Donaldson. *BMJ* 2011;342:d1980
2. **Major Determinants of Height Development in Turner Syndrome (TS) Patients Treated With GH: Analysis of 987 Patients From KIGS** M Ranke, A Lindberg, AK Albertsson-Wikland, D Dunger, WS Cutfield, M Tauber, P Wilton, H Wollmann, E Reiter on behalf of the KIGS International Board *Ped Res* 2007;61(1);105-110

All authors have nothing to declare