

“Girls with idiopathic premature adrenarche achieve normal adult height”.

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BACKGROUND & OBJECTIVES

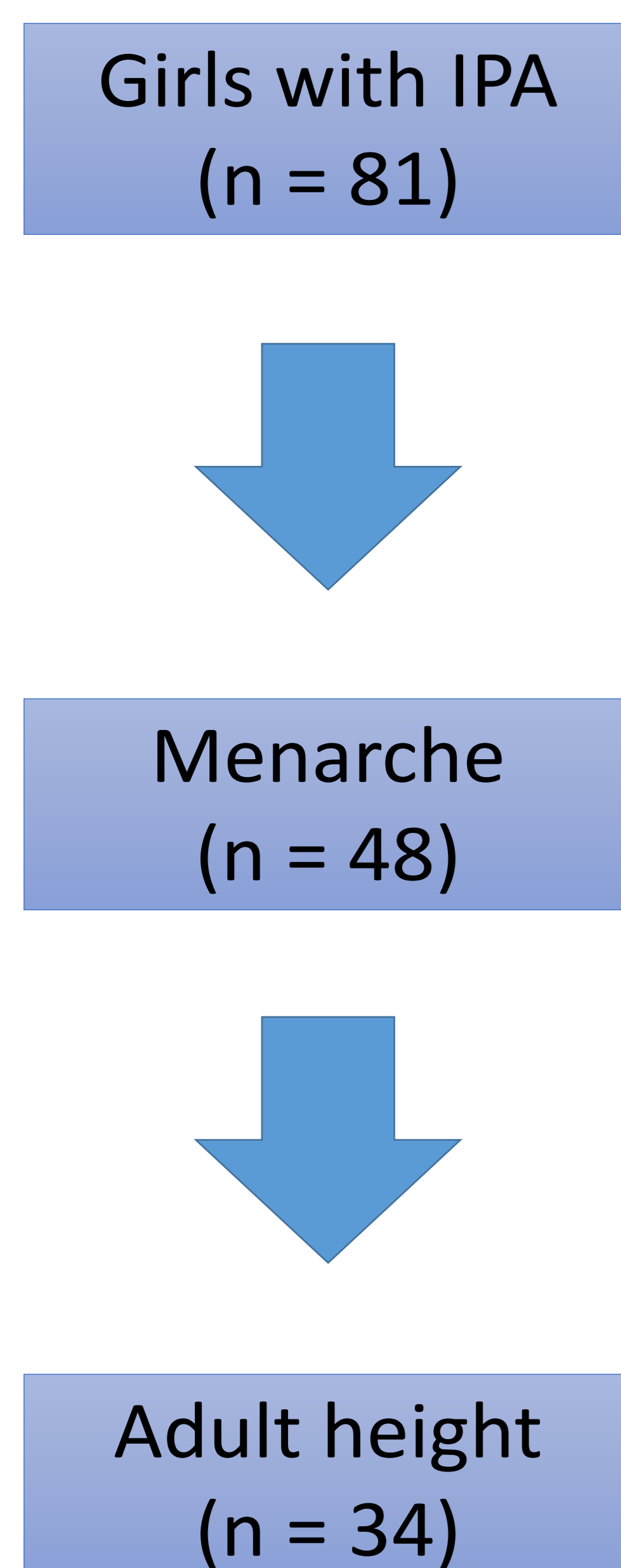
- Studies about pubertal onset and the menarcheal age in girls with the antecedent of idiopathic premature adrenarche (IPA) are limited and with discordant results.
- For these reasons, we created a cohort of girls with the diagnosis of IPA. The objectives of our study were:
 - a) To know the age of pubertal onset.
 - b) To evaluate menarcheal age.
 - c) To determine the growth rate in the first two years after the IPA diagnosis.
 - d) To collect adult height data in these girls.

MATERIAL AND METHODS

- IPA girls cohort with the following inclusion criteria: appearance of pubic and/or axillary hair before 8 years old after excluding other pathologies causing hyperandrogenism as ovarian or adrenal tumours (detected by ultrasound) and congenital adrenal hyperplasia (evaluated by ACTH stimulation test).
- We planned a follow-up of these patients from their diagnosis until reaching adult height, collecting anthropometric and pubertal development data through visits every six months.

RESULTS

- This cohort was composed of 81 girls with IPA.
- At diagnosis, their mean height was significantly greater than the target height ($p < 0.001$).
- The mean of menarcheal age of girls with IPA was significantly lower than their mothers ($p < 0.05$).
- At the time of this study, 34 girls (42% of the cohort) reached an average final height significantly higher than the predicted adult height at diagnosis ($p < 0.05$) and slightly higher, but not reporting significant differences, with their target height.



| VARIABLE | AVERAGE | 95% CI |
|---|---------|---------------|
| Age at diagnosis (years) | 7.54 | 7.26 – 7.82 |
| Difference bone – chronological age (years) | 0.90 | 0.72 – 1.08 |
| Height at diagnosis (SDS) | +1.59 | 1.38 – 1.80 |
| Target height (SDS) | +0.30 | 0.09 – 0.52 |
| Predicted adult height at diagnosis (SDS) | +0.24 | -0.03 – 0.58 |
| Growth rate in first age after diagnosis (SDS) | +1.36 | 0.98 – 1.75 |
| Growth rate in second age after diagnosis (SDS) | +1.62 | 1.06 – 2.18 |
| Tanner II stage (years) | 9.62 | 9.38 – 9.86 |
| Menarcheal age (years) | 11.50 | 11.18 – 11.83 |
| Menarcheal age of their mothers (years) | 12.14 | 11.83 – 12.46 |
| Final height (SDS) | +0.72 | 0.38 – 1.05 |

CONCLUSION

Our cohort of girls with IPA shows advanced pubertal development compared to its mothers but this finding does not seem to affect their adult height.