

# THE EFFICACY OF TREATMENT IN VIETNAMESE CHILDREN WITH CENTRAL PRECOCIOUS PUBERTY

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## INTRODUCTION:

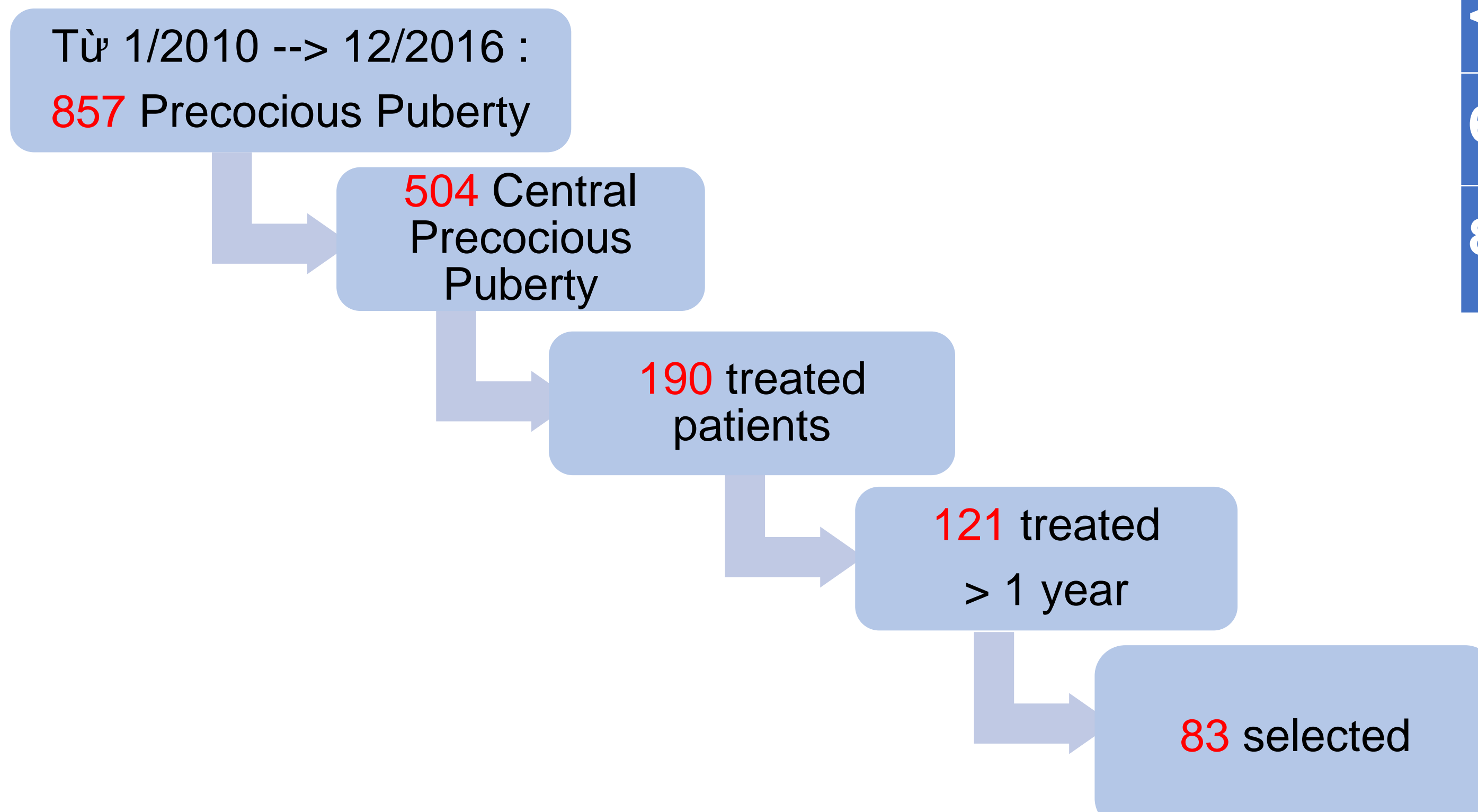
Central Precocious Puberty (CPP) may be lead to consequences such as limitation adult stature, sexual abuse, and emotional distress. GnRH agonist therapy in patients with CPP has been demonstrated in increasing adult height and improving emotional distress in puberty stage.

**OBJECTIVE:** Evaluating the efficacy of treatment in patients with central precocious puberty after one year in Children Hospital 2 in 7 years, from 01/2017 to 12/2016.

**METHODS:** Cross sectional study, retrospective study 83 cases CPP which were treated minimum 1 year at Children Hospital No2 in 7 years, from 01/2017 to 12/2016

### ELIGIBILITY CRITERIA:

- Accelerated CPP:
  - The development of secondary sex characteristics < 8 years old in male and < 9 years old in female or vaginal bleeding < 9,5 years old **AND**
  - BA -CA ≥ 1 year **AND**
  - aGnRH stimulation test (+)
- Treated with Diphereline 3,75mg ≥ 1 year



**RESULTS:** The secondary sex characteristics were almost reducing or suppressive, the menarche was disappeared in girls who had vaginal bleeding before. Mean height velocity decreased from 7cm per year to 5.4cm per year, BMI score increased significantly from 18.05 kg/m<sup>2</sup> to 19 kg/m<sup>2</sup>. Basal LH, FSH and estradiol concentration had dropped sharply after 3 months. The difference between bone age and chronological age declined from 28 months to 25 months after 1 year. Bone mineral density, Calcium and vitamin D concentration were normal after 12 months. The predicted adult height after and before treatment were no different significantly. However, in patients under 6 years old, the difference of predicted adult height between pre- and post-treatment was statistically significant (156.5 -161.1 cm).

## CLINICAL FEATURES

|                         | Frequency ( N = 80) |            |             |            |
|-------------------------|---------------------|------------|-------------|------------|
|                         | Before              | 3 months   | 6 months    | 12 months  |
| <b>Pubic hair</b>       | 26 (32,5%)          | 26 (32,5%) | 25 (31,3%)  | 25 (31,3%) |
| <b>Axillary hair</b>    | 18 (22,5%)          | 18 (22,5%) | 17 ( 21,3%) | 15 (18,8%) |
| <b>Vaginal bleeding</b> | 9 (11,3%)           | 7 (8,8%)   | 0           | 0          |
| <b>Vaginal muscosa</b>  | 20 (25%)            | 12 (15%)   | 6 (7,5%)    | 2 (2,5%)   |

## PREDICTED ADULT HEIGHT(PAH)

|                         | Mean ± SD (cm)   |                 | Paired T-Test |
|-------------------------|------------------|-----------------|---------------|
|                         | Before treatment | After treatment |               |
| <b>&lt; 6 years old</b> | 156,5 ± 3,1      | 161,1 ± 2,8     | p = 0,022     |
| <b>6 – 8 years old</b>  | 159,5 ± 1,5      | 160,2 ± 1,4     | p = 0,396     |
| <b>8 years old</b>      | 159,6 ± 1,8      | 160,2 ± 1,36    | p = 0,704     |



BREAST ENLARGEMENT TANNER III

**CONCLUSION:** The secondary sex characteristics were almost reducing or suppressive. All patients had reduced height velocity and the difference between bone age and chronological age. Predicted adult height changed considerably in children under 6 years old.

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