Psychosocial changes after GnRH agonist treatment in girls with idiopathic central precocious puberty

Seung Yang M.D., Min Jae Kang M.D., Yeon Jeong Oh M.D., Il Tae Hwang M.D.
Department of Pediatrics, Hallym University College of Medicine, Seoul, Korea (Republic of)

Background
In precocious puberty, girls experienced secondary sexual development earlier psychologically as well as physically. Self-stress due to a different body shape from the peer group, psychological concerns due to discrepancies between physical and chronological age, and long-term behavioral problems could occur.

Objective and hypotheses
The aim of this study was to evaluate psychosocial changes in girls with precocious puberty between before and after treatment.

Method
The girls with idiopathic central precocious puberty whose parents completed the Korean-Child Behavior Checklist (K-CBCL) (n=66) and Children’s Depression Inventory (CDI) (n=61) were enrolled in this study. K-CBCL and CDI were checked at diagnosis and 1 year after treatment with GnRH agonist. T score was used in K-CBCL for statistical analysis.

Results
In K-CBCL, T score of problem behavior total score was significantly lower at 1 year after treatment than at diagnosis (P=0.000). T scores of Anxiety/Depression, Atrophy/Depression, Aggressive behavior, Social immaturity and Other problem were significantly lower, respectively. T scores of Affective problems, Anxiety problems and Oppositional defiant problems were significantly lower. T score of Post-traumatic stress problems was significantly lower. T score of Academic performance was significantly higher. In CDI, Score was significantly lower at 1 year after treatment than before treatment.

Conclusions
In idiopathic central precocious puberty, psychosocial problems as well as physical changes may be improved by suppression of sex steroids after treatment with GnRH agonist.