

ORIGINAL ARTICLE

Treated and untreated women with idiopathic precocious puberty: long-term follow-up and reproductive outcome between the third and fifth decades

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Context Central precocious puberty (CPP), treated or untreated, may have implications in adulthood.

Objective To assess the reproductive outcome and social adjustment of former CPP women between the 3rd and 5th decades of life.

Design Cross-sectional study of an historical cohort.

Methods Demographic data and gynaecological history of 214 CPP women aged 25–56 years [135 GnRH analogue (GnRHa)-treated, 18 cyproterone acetate (CyA)-treated, 61 untreated] and of 446 controls with normal puberty, matched for age and year of birth, were recorded in a structured interview.

Results Marital status, education and number of children were similar in CPP women and controls. Clinical hyperandrogenism (acne/hirsutism with oligomenorrhoea) was more frequently reported in CPP women than in controls: GnRHa-treated 29.6% vs 17.4% ($P = 0.006$), CyA-treated 50% vs 20.4% ($P = 0.04$), untreated 34.4% vs 17.2% ($P = 0.003$), with no significant difference between CPP groups. Spontaneous pregnancy was similarly achieved by treated CPP and controls: GnRHa-treated 90.4% vs 93.4%, CyA-treated 86.7% vs 90.2%. Assisted fertilization rate was higher in untreated CPP than treated CPP groups ($P = 0.006$) and controls ($P = 0.03$). Untreated CPP was the only parameter associated with clinical hyperandrogenism (OR=2.04, 95% CI, 1.0–4.16, $P = 0.07$) and fertility problems (OR=3.40, 95% CI, 1.15–10.0, $P = 0.047$). Course of pregnancy was uneventful in 90.2% of CPP women and 90.9% of controls.

Conclusions The increased rate of clinical hyperandrogenism among CPP women implies that the underlying neuroendocrine dysfunction persists into adult life. Pubertal suppression treatment may have a protective effect as fertility problems were

more prevalent only among untreated CPP women. Educational achievements and marital status were unaffected by CPP.