P2-P359  Clinical, hormonal and metabolic profile in adolescent girls treated with gonadotropin releasing hormone agonist for idiopathic central precocious puberty

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Introduction: Gonadotropin-releasing hormone agonist (GnRHa) is the gold standard treatment for central precocious puberty (CPP). In recent years, increased prevalence of polycystic ovary syndrome (PCOS) has been reported in girls treated with GnRHa for CPP. Attributes of PCOS overlap normal pubertal changes, making the diagnosis of PCOS in adolescence controversial.

Aim: To assess the metabolic profile, the prevalence of PCOS and describe its phenotypes as function of different combination of diagnostic criteria in young girls treated with GnRHa for idiopathic CPP (ICPP).

Methods: We evaluated 22 girls treated with GnRHa for ICPP, who were at least 2 years after menarche and had attained near final height. We assessed auxological parameters, lipids, markers of insulin resistance, androgen levels, and the prevalence of PCOS and PCOS phenotypes. PCOS was diagnosed using 2 methods: 1) the Rotterdam criteria (2004) and 2) the 2015 consensus of Pediatric Endocrine Society on PCOS diagnosis in adolescents criteria, consisting of otherwise unexplained hyperandrogenism and persistent anovulatory menstrual abnormalities.

Results: Mean gynecological age at evaluation was 3.06 ± 1 years. Duration of treatment with GnRHa was 3.2 ± 1.7 years.

There were no statistically significant differences at the time of CPP diagnosis between PCOS and non-PCOS subjects in auxologic and biochemical data, no predictive factors for PCOS were found.

Conclusions: Patients with ICCP treated with GnRHa need to be followed-up for PCOS in adolescence and in young adulthood, in order to establish whether the condition persists, due to its implications on fertility and metabolic complications. In our series, we have no arguments to sustain that GnRHa treatment increased the prevalence of PCOS.

Bibliography: