

Metabolic and reproductive features before and during puberty in daughters of women with polycystic ovary syndrome

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Context: A significant proportion of the first-degree female relatives of women with polycystic ovary syndrome (PCOS) may be at risk for developing PCOS. However, it is not known at which stage of pubertal development the hormonal and metabolic abnormalities ensue in PCOS. Objective: The aim of the study was to assess the reproductive and metabolic profiles of daughters of women with PCOS (PCOSd) during the peripubertal period, a stage during which the gonadal axis is activated and PCOS may become clinically manifest. Design: Ninety-nine PCOSd [30 prepubertal and 69 pubertal (Tanner II-V)] and 84 daughters of control women (Cd) (20 prepubertal and 64 pubertal) were studied. An oral glucose tolerance test, a GnRH agonist test (leuprolide acetate, 10 µg/kg sc), and a transabdominal ultrasound were performed. Gonadotropins, sex steroids, SHBG, glucose, insulin, and lipids were determined. Results: Both groups had similar chronological ages and body mass index SD scores according to Tanner