

Abstract

Two common endocrine system disorders are polycystic ovary syndrome (PCOS) and premature adrenarche (PA). PCOS occurs later in puberty whereas PA develops at the start. Given both are associated with elevated levels of androgens, it is questionable if the two disease processes overlap or if PA is a precursor to PCOS. This study aims to determine if PA could be a precursor to PCOS or simply a benign variant of normal puberty. Since PCOS is a condition associated with many comorbidities like diabetes, fatty liver disease, and metabolic syndrome, it would be helpful to know those who were more likely to develop the disorder to enact earlier interventions. The physical, hormonal, and metabolic characteristics of adolescent girls with PA at the time of their PCOS diagnosis was compared to similarly aged girls who had a history of normal pubertal development at the time of their PCOS diagnosis. This was done via a retrospective chart review of EMRs at pediatric centers in Colorado and Florida. It was found that PCOS biochemical and physical presentation in girls with a history of PA does not differ from those without PA. This study further supports the view of PA as a benign deviation from normal pubertal development. There are no conflicts of interest to disclose.