The clinical criteria for the diagnosis of the POS in adolescence have not yet been defined, and are put as similar to those of the adult phase. However, not always in adolescence may we use the same criteria of the adult phase adequately, mainly when correlating lower gynecological ages and take into account the characteristics of this age range as well as the evolutionary character of the diseases. Clinical and laboratory alterations become confused with physiological alterations due to puberty, requiring further study.

Objective: Evaluate clinical and laboratory variables in adolescents related to PCOS

Method: Observational, comparative, transversal cut study with 139 female adolescents aged between 12 and 19, underwent a clinical and laboratory evaluation of insulin resistance (IR), hormonal and lipid profile. Two groups were created: G-1: 67 with PCOS, and G-2: 72 without PCOS.

Results: Observed: G-1 present: acanthosis (p=0,006), waist (p=0,027), Family History (FH) of Obesity (p=0,034), FH of PCOS (p<0,0001), Metabolic Syndrome (MS) (p<0,0001), fasting glucose (p=0,029), fasting insulin (p=0,0001), glucose post Oral Glucose Tolerance Test (OGTT) 120 m (Glucose-120) (p=0,020), insulin post OGTT 120m (Insulin-120) (p=0,0001), HOMA-IR (p=0,0001), TG (p=0,012), Total Testosterone (TT) (p=0,021), LH (p=0,021) greater than G-2. And G/I (p=0,0001), QUICK (p<0,0001) and HDL (p<0,003) lower than G-2.

Conclusion: PCOS is a progressive disease whose morbidity increases over time, meaning that its appearance during adolescence is more harmful to health than when it appears during the adult stage. Diagnosis during this phase will allow preventive interventions that may alter the course of this disease. The criteria used to diagnose PCOS during adolescence must take into account the pathophysiological progress of the factors constituting the syndrome, particularly with regard to IR and the specific characteristics of the pediatric and adolescent populations.