

AMH

FSH

TSH

LH

Polycystic Ovary Syndrome in Adolescents^a

Click here for topics associated with this algorithm

Abbreviations INDICATIONS FOR TESTING Anti-Müllerian hormone Clinical signs of hyperandrogenism (eg, hirsutism, severe **DHEAS** Dehydroepiandrosterone acne) and/or ovulatory dysfunction (eg, menstrual sulfate irregularity based on yrs postmenarche) Follicle-stimulating hormone Luteinizing hormone **PCOM** Polycystic ovary morphology **PCOS** Polycystic ovary syndrome PERFORM Thyroid-stimulating hormone Formal clinical assessment^b for hyperandrogenism and ovulatory dysfunction^c Testing to exclude other possible etiologies^d Clinical findings suggest Clinical findings suggest Clinical evidence of both ovulatory dysfunction^e hyperandrogenism^e hyperandrogenism and No initial evidence of ovulatory No initial evidence of ovulatory dysfunction^e hyperandrogenism dysfunction Test for biochemical hyperandrogenism Test for ovulatory dysfunction in PCOS confirmed midluteal phase Free testosterone concentration by laboratory **ORDER** calculation^f Serum progesterone measurement AND Total testosterone concentration by tandem mass spectrometry Evidence of biochemical Evidence of ovulatory dysfunction hyperandrogenism Yes PCOS confirmed PCOS confirmed Insufficient evidence for PCOS diagnosis Consider a designation of "At risk for PCOS" Reassess at or around the age of full reproductive maturity (ie, 8 yrs postmenarche)

1f free testosterone is not elevated, measurement of DHEAS or androstenedione by tandem mass spectrometry may be considered

References

2. Goodman NF, Cobin RH, Futterweit W, et al. American Association of Clinical Endocrinologists, American College of Endocrinology, and Androgen Excess and PCOS Society disease state clinical review: guide to the best practices in the evaluation and treatment of polycystic ovary syndrome—part 1. Endocr Pract. 2015;21(11):1291-1300.

^aDefined as individuals <8 yrs postmenarche.

bRefer to the modified Ferriman-Gallwey scale to evaluate hirsutism. For clinical criteria in the evaluation of menstrual irregularity, refer to the International Evidence-Based Guideline for the Assessment and Management of Polycystic Ovary Syndrome

Ovulatory dysfunction can, but may not always, present with menstrual irregularity. If anovulation is suspected in the presence of regular menstruation, assess midluteal serum progesterone concentrations.

dRule out thyroid disease (test TSH), hyperprolactinemia (test prolactin), and congenital adrenal hyperplasia (test serum 17-hydroxyprogesterone). Additional lab work to rule out hypogonadotropic hypogonadism (test LH and FSH), ovarian failure (test FSH), Cushing disease, and androgen-secreting tumors should be considered based on patient history and clinical picture.

^eWith no other etiologies identified.

^{1.} Teede HJ, Tay CT, Laven J, et al. International evidence-based guideline for the assessment and management of polycystic ovary syndrome 2023. Monash University, 2023. [Updated: August 2023; Accessed: September 2023