Polycystic Ovary Syndrome (PCOS) Screening & Diagnosis

Partnering to Navigate Polycystic Ovary Syndrome PCOS

Screening:

Diagnosis:

Evaluate for PCOS in any patient with:
Irregular or missed periods
OR
Unwanted hair growth, acne or thinning hair
OR
Difficulty becoming pregnant

PCOS Diagnostic Criteria

2 out of 3 of the following:

1. **Oligo- or anovulation** (typically with irregular menses)
2. **Clinical and/or biochemical signs of hyperandrogenism**
3. **Polycystic Ovarian Morphology** (Based on US or AMH)

Irregular menses + clinical hyperandrogenism: **Exclude other causes (A,B) Diagnose PCOS**

Irregular menses + no clinical hyperandrogenism: **Test for Biochemical Hyperandrogenism (B) & Exclude other causes (A)**

- **Biochemical Hyperandrogenism present Diagnose PCOS**
- No Biochemical Hyperandrogenism present, Recommend Pelvic Ultrasound (AMH as alternative) **If Polycystic Ovarian Morphology present, Diagnose PCOS**

Hyperandrogenism without irregular menses: **Exclude other causes (B), Evaluate for ovulatory dysfunction (A,C) & Recommend Pelvic Ultrasound** (Anti-Mullerian hormone or AMH can be used as an alternative to US in adults)

- **If ovulatory dysfunction present, Diagnose PCOS**
- **If Polycystic Ovarian Morphology present, Diagnose PCOS**

Laboratory Evaluations:
(A) Evaluation of irregular menses: Check TSH, prolactin, FSH
(B) Evaluation of hyperandrogenism: Check total testosterone, DHEAS, 17-hydroxyprogesterone. If Cushingoid features, check urine free cortisol.
(C) Evaluate for ovulatory dysfunction: Check progesterone level ~7days prior to 1st day of next menses

Irregular Menses	Can be normal in the first year post menarche = pubertal transition. > 1 to < 3 years post menarche: < 21 or > 45 days. > 3 years post menarche to perimenopause: < 21 or > 35 days or < 8 cycles per year. > 1 year post menarche > 90 days for any one cycle. Primary amenorrhea by age 15 or > 3 years post thelarche (breast development). **Ovulatory dysfunction can still occur with regular cycles.** If anovulation suspected test progesterone levels ~7 days prior to 1st day of next menses. Level >3 ng/ml indicates ovulation.
Hyperandrogenism	Clinical Hyperandrogenism: Hirsutism, Acne, Androgenic alopecia (male-pattern baldness) Biochemical Hyperandrogenism: Total testosterone > 45 ng/dl OR DHEAS > 250 ug/dl 17-hydroxyprogesterone > 200 ng/dL may represent nonclassic CAH
Polycystic Ovaries on Ultrasound	Polycystic Ovarian Morphology (PCOM) is defined as: 1) 20 or more follicles in one or both ovaries (on newer, more sensitive ultrasound machines) or Ovarian volume > 10ml on either ovary OR 2) Anti-mullerian hormone (AMH) > 4