04/06/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Hee Mun(@HeeMun8) Case Discussants: Julia(@JuliaSchlender1) and Vijay (@vijaybramhan)

Scribing (Nikola)

CC: 22 y/o F presents for irregular menses (Menarche at 14), and OCP (Yaz).

HPI:
22 F with menarche at 14 and previously regular cycles. In 2022 had 1 year of amenorrhea, after stress and 10 kg weight gain, followed by irregular menses and severe acne unresponsive to doxy/isotretinoin. Started Yaz 6 months ago for acne, resulting in prolonged heavy bleeding (14 days - 8 pads/day)

ROS: Hair thinning, 14 kg weight gain, headache, chest palpitation, no edema, nights sweat, dysuria

PMH:
Acne, generalized anxiety
Coeliac disease

Meds: Escitalopram

Fam Hx: Endometriosis (mother and sister), celiac disease

Soc Hx: non sexually active, smoking

Vitals: WNL BMI: 30
Exam:
HEENT: nl (no pallor, no visual field defects, no bitemporal hemianopia, no thyromegaly)
CV: RRR, WNL
Abd: mild bloating
Neuro: no focal deficit, normal DTR
MSK: Cystic acne, mild hirsutism (Ferriman-Gallwey score 12/36 - face, chin, back), acanthosis nigricans in axillae

Notable Labs & Imaging:
Hematology:
WBC: Hgb: 11 (low -> iron deficiency)

Chemistry
CMP WNL, TSH/T4 WNL, Prolactin 35 (high), LF/FSH WNL with LH:FSH ratio (2:1 -> elevated), Testosterone and DHEAS (high), Cortisol 26 (high), fasting insulin (high), and HbA1c normal, lipid panel TG and LDL high

Dexamethasone suppression test negative
Patient complains of visual defects

Imaging:
MRI: WNL (no cerebral sinus thrombosis or prolactinoma)
Pelvic US: > 15 small follicles in both ovaries, ovarian volume 11 cc, non-fatty liver. No mass.

PCOS Dx = 2 out of 3 criteria:
- Irregular periods (>35 days, anovulation)
- High androgens (acne, hirsutism, high testosterone)
- Polycystic ovaries on US (25 or more follicles or >10 mL)

Dx: PCOS
Tx: Metformin and Spironolactone

Problem Representation: 22 y/o F presents with irregular menses, hirsutism, acne and acanthosis nigricans is found to have high testosterone levels, a high LH to FSH ratio and several small follicles in both ovaries on pelvic US.

Teaching Points(Minahil):
-**Approach to irregular menses**-**History:**menstrual pattern, changes in weight, medication Hx, drug abuse Hx ,timings- why pt presenting now? When did irregularity start? , assoc symptoms - hot flashes,acne, fatigue,galactorrhea
Initial **Investigations:**Thyroid levels, pregnancy test, d dimer , prolactin level,FSH/LH,testosterone
-Signs of hyperandrogenism + weight gain + irregular menses->think **PCOS** but if also with central obesity striae,mood swings,consider **Cushing's**->cortisol workup 1).**low cortisol** in morning(peak time) suggest adrenal insufficiency , 2)**High cortisol** at night (when it should be low) suggests Cushing's
-Celiac disease is autoimmune disease ,commonly coexist with T1DM,autoimmune thyroiditis
-**Antipsychotics**-dop antagonism->incr prolactin->menstrual changes
-**Acanthosis nigrican** signals insulin resistance,screen with HbA1c,fasting glu , lipid panel
-**PCOS diagnostic criteria**(two of the three criteria)1.Irregular menstrual cycle, 2.Clinical signs of hyperandrogenism-acne/hirsutism,3.positive ultrasound findings

Most common endocrine disorder in young females is PCOS followed by thyroid.