How Mira assists in clinical evaluation and treatment

Case Report

Let's Normalize Women Being Well

mira

For Healthcare Professionals

Case report: Patient #1

Patient background

46 Female
G4P3 (ages 7, 11, 14)

Past medical history: unremarkable except for IUD in place for menorrhagia

Medication: Levonorgestrel IUD

BMI 23
Diet mostly vegetarian and has tried intermittent fasting

Exercises cardio 2–3 days per week. Strong yoga and meditation practice daily

Patient Background continued

The patient's chief complaint was menorrhagia despite the IUD

She was having mid-cycle spotting and menses that lasted 8+ days

Her Gynecologist told her to keep her IUD, and that the bleeding was normal

Summary of symptoms

Abnormal uterine bleeding (8+ days), hot flashes, night sweats interrupting sleep, irritability and anxiety which were pretty new for her, weight gain of 15 lb over the last year, vaginal dryness causing dyspareunia and vaginal itching which was misdiagnosed as lichen sclerosis.

Plan

Check some labs and start tracking hormones with Mira to understand what her estrogen looks like

Based on age and symptoms the provider suspected that she was perimenopausal

Patient Results

Prior endometrial biopsy showed proliferative endometrium

A prior transvaginal ultrasound (TVUS) one year ago showed a correctly placed IUD and posterior fundal fibroid measuring 1.5 cm

Repeat ultrasound: simple cyst on left ovary, ES 8 mm, and re-demonstrated correctly placed IUD and posterior fundal fibroid of 1.8 cm

Blood work collected
(7 days before testing with Mira):
CMP – within optimal range
CBC – within optimal range
Thyroid panel – within optimal range
Iron panel – within an optimal range
Vitamin B12 – within optimal range
Folate – within optimal range
Vitamin D3 – within optimal range
Total Testosterone – 30
SHBG – 140
Estradiol – 946
hs-CRP – within optimal range
Saliva testing: cortisol + DHEAS – normal 4-point cortisol curve

Patient Situation

Immediately before testing with Mira, the patient had 14 days of menstrual bleeding (provider suspected a LOOP cycle)

CD 6–9 She was having increased irritability and insomnia, so the provider started her on oral micronized progesterone (OMP) to help balance out the serum estradiol level of 946
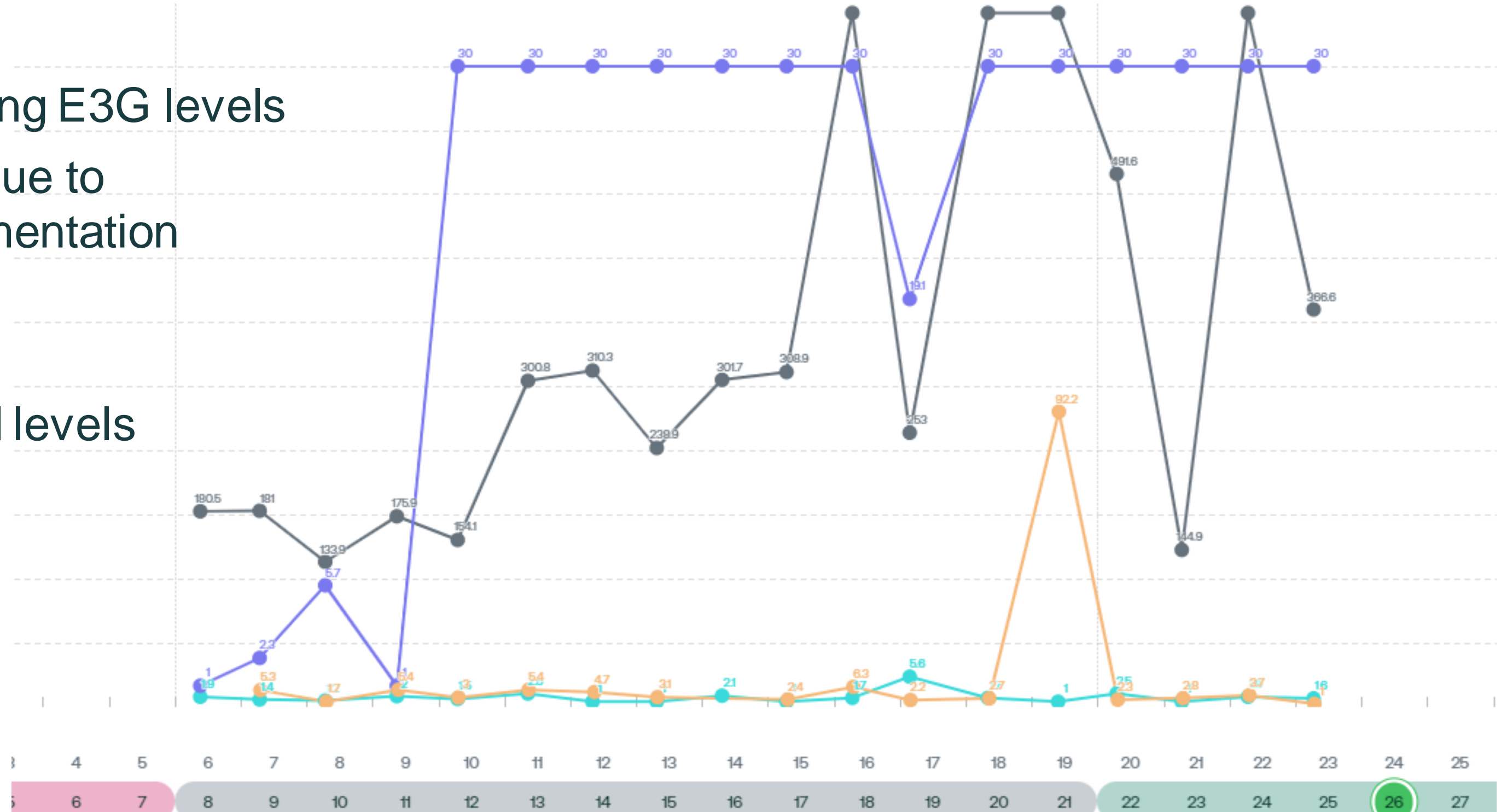
Mira Chart

Mira data discovered:

- Elevated and fluctuating E3G levels
- PdG levels elevated due to progesterone supplementation

Provider assessment:

- You can see estradiol levels were fluctuating significantly, which is pretty characteristic for perimenopause

Treatment / Interventions / Assistance

The Patient was quite symptomatic with hot flashes, irritability, anxiety, and some depressive symptoms so she started on an estradiol patch

Progesterone
- Reported improved sleep

Magnesium glycinate 240 mg at night

Intermittent fasting protocol

Strength training program 4 days a week

The patient did not want to keep charting after using the estradiol patch and progesterone along with the LNG-IUD, so no follow-up Mira testing was completed but rather monitored symptoms

Summary

A 46-year-old perimenopausal woman, with a myriad of symptoms including hot flashes, night sweats, insomnia, anxiety, irritability, depression, and weight gain came to the provider to understand what her hormones were doing

Serum testing revealed very high estrogen, but this is just a snapshot in time. Mira was able to help both the patient and provider understand her underlying hormone pattern and affirm her experience of what symptoms she was having

Summary

Using Mira's data, the provider was able to start by adding progesterone support, and then later added in estradiol to help further optimize her perimenopausal care

Mira was able to demonstrate the wildly varied estrogen fluctuations that occur during perimenopause which is the driver for the majority of symptoms patients experience

3 months follow up the patient is doing well on OMP 100mg QHS and estradiol 0.05mg patch twice weekly. She still has an LNG-IUD in place to help with bleeding. Her symptoms are optimally managed at this point