

DELAYS TO CARE IN PATIENTS WITH PRIMARY OVARIAN INSUFFICIENCY

Authors: Wong AJ (1), Gaines SB (2), Sriprasert I (3), Winer S (1), Paulson RJ (1)

Affiliations: (1) University of Southern California Keck School of Medicine, Dept. of OB/GYN, Division of Reproductive Endocrinology and Infertility, Los Angeles, CA, USA; (2) University of Southern California Keck School of Medicine, Los Angeles, CA, USA; (3) University of Southern California Keck School of Medicine, Dept. of OB/GYN, Los Angeles, CA, USA

Background

A critical challenge in managing primary ovarian insufficiency (POI) is the delay in evaluation, diagnosis, and initiation of appropriate care. This delay in management can have significant sequelae, including prolonged periods of unaddressed symptoms and delayed treatment, specifically hormone therapy, with potential bone and cardiac impact.

Objective

The aim of this study was to characterize the presentation and delays to care in patients with POI at a large metropolitan county hospital. We also sought to evaluate the association between etiology of POI (spontaneous, genetic causes, and chemotherapy/radiation) and delays to care.

Materials and Methods

A retrospective cohort study of women with POI who received care at our clinic between January 2023 to August 2024 was performed. The primary outcome was the duration of time before a serum estradiol and follicle stimulating hormone (FSH) were checked. Secondary outcomes were the findings of their work up: presenting symptom(s), Anti-Müllerian Hormone (AMH) level, Z-score of baseline DEXA scan, associated comorbidities (cardiovascular disease, anxiety, depression, dry eye syndrome), and hormone therapy preferences. A sub-analysis by etiology of POI was also performed. Categorical variables were analyzed with chi-squared tests. One-way ANOVA compared means across groups for continuous variables.

Results

In total, 40 POI patients were included. The mean age \pm SD was 35.0 ± 6.9 years. Most patients were Hispanic (75%, n=30) and nulliparous (median live births=0, IQR 0-2). More than half of women had more than 4 doctor's visits where they reported their presenting symptom(s) before a diagnosis was made. In 30% of women (n=12) it took more than 1 year after reporting these symptoms before a serum estradiol and FSH were checked. The most common presenting symptoms were menstrual disturbances (90%, n=36), infertility (12.5%, n=5), and vasomotor symptoms (10%, n=4). The mean AMH \pm SD was 0.017 ± 0.022 ng/ml. The mean femoral neck Z-score on baseline DEXA \pm SD was -1.11 ± 1.16 . The most common choice for estrogen replacement was the patch (57.5%, n=23) and most patients desired cyclic progestin dosing rather than continuous (57.5%, n=23).

Subgroup analysis by etiology of POI was performed (spontaneous POI=25, genetic =8, chemotherapy/radiation=7). There were no differences between groups in age, BMI, race/ethnicity, gravity/parity, or presenting symptoms. Patients who had POI secondary to chemotherapy/radiation had a statistically significantly higher median number of doctor's visits before a diagnosis was established (median 10, IQR 6-20) compared to those who had spontaneous POI (median 3, IQR 1-5) or genetic causes of POI (median 5.5, IQR 2.5-6) p=0.03. There were no statistically significant differences in AMH level or femoral neck Z-score between groups at the time of presentation.

Conclusions

Women with POI experience significant delays to diagnosis and treatment. Even in cases where patients regularly access healthcare, such as cancer surveillance, diagnosis of POI was delayed. Both patients and physicians should be educated on the importance of tracking cycles and monitoring for symptoms concerning for POI, so that evaluation can be performed in a timely fashion.

Word Count: 488