



Frequency, Presentation and Factors affecting Premature Ovarian insufficiency in sub-fertile Pakistani women



OBJECTIVE

Premature Ovarian Insufficiency (POI) is a complex and relatively poorly understood entity. The aim was to determine the frequency, clinical presentation and factors affecting POI in sub-fertile Pakistani women.

DESIGN

A retrospective case control study conducted in subfertility clinic, Gynecology Unit II of DRKMP Civil Hospital Karachi and Dow University of Health Sciences from 1st Jun 2019 to 31st May 2022 over a period of three years.

METHODS

All informations of patients attending subfertility clinic is routinely recorded over a proforma in hospital. The data comprised of case records of these patients and collected onto a predesigned proforma by trained post graduate doctors. A total of 1891 patients attended. There were 46 patients with POI who were compared with equal number of normally menstruating females from the same setting having normal levels of FSH (i.e. ≤ 8.9 mIU/L) as controls. The factors considered were age, number of children, tobacco use, cycle regularity, onset of amenorrhea, BMI, past medical/ surgical history, anemia, hormonal levels and menopausal symptoms. Our hospital does not offer AMH levels. Data was stored and analyzed through SPSS Version 26.

RESULTS

POI occurred in 2.4% of our patients. Mean age 32.4 ± 5.5 (range 18- 39, $p=0.007$) years and mean period of amenorrhea was 12.0 ± 14.7 months. Majority 28(60.8%) experienced abrupt amenorrhea and 27(58.6%) of them had irregular menstruation before cessation ($p=0.02$). Most 29(63%) presented with primary subfertility ($p=0.012$). One fifth 9 (22%) had positive family history. Mean BMI was 23.9 ± 4.2 (range 16-36.3) and mean FSH was 79.1 ± 40.5 mIU/ ml. About half 21(51.2%) were diagnosed with a medical problem and surgical history of removal of unilateral endometrioma/ oophorectomy was present in 3(5%) patients (chart 1). Underlying medical conditions were tuberculosis, thyroid dysfunction, autoimmune disorder, Diabetes mellitus etc. (chart 2). None received chemo/ radiotherapy. Menopausal symptoms were present in 30(65.2%) most common lethargy and body aches. Tobacco use, occupation, rural/ urban origin, BMI and anemia had insignificant relationships.

CHART 1. ETIOLOGICAL FACTORS

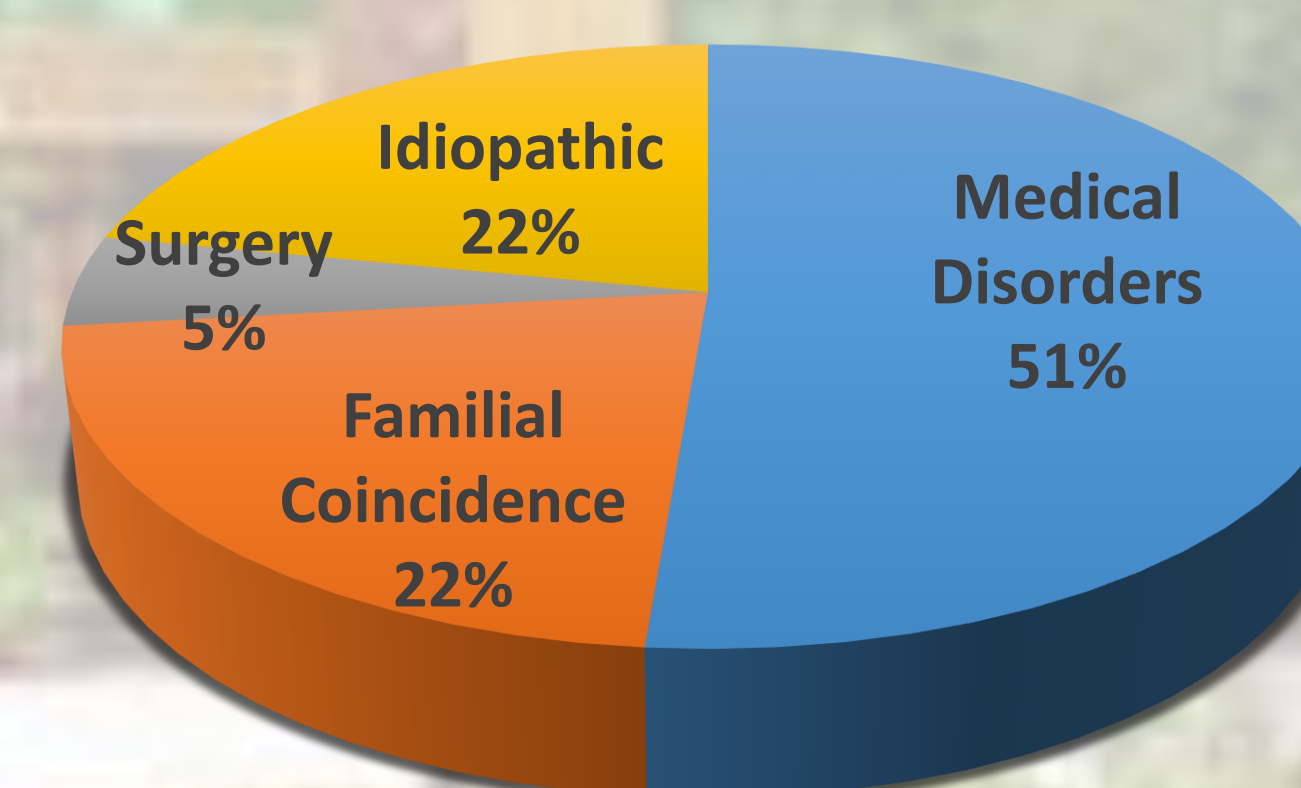
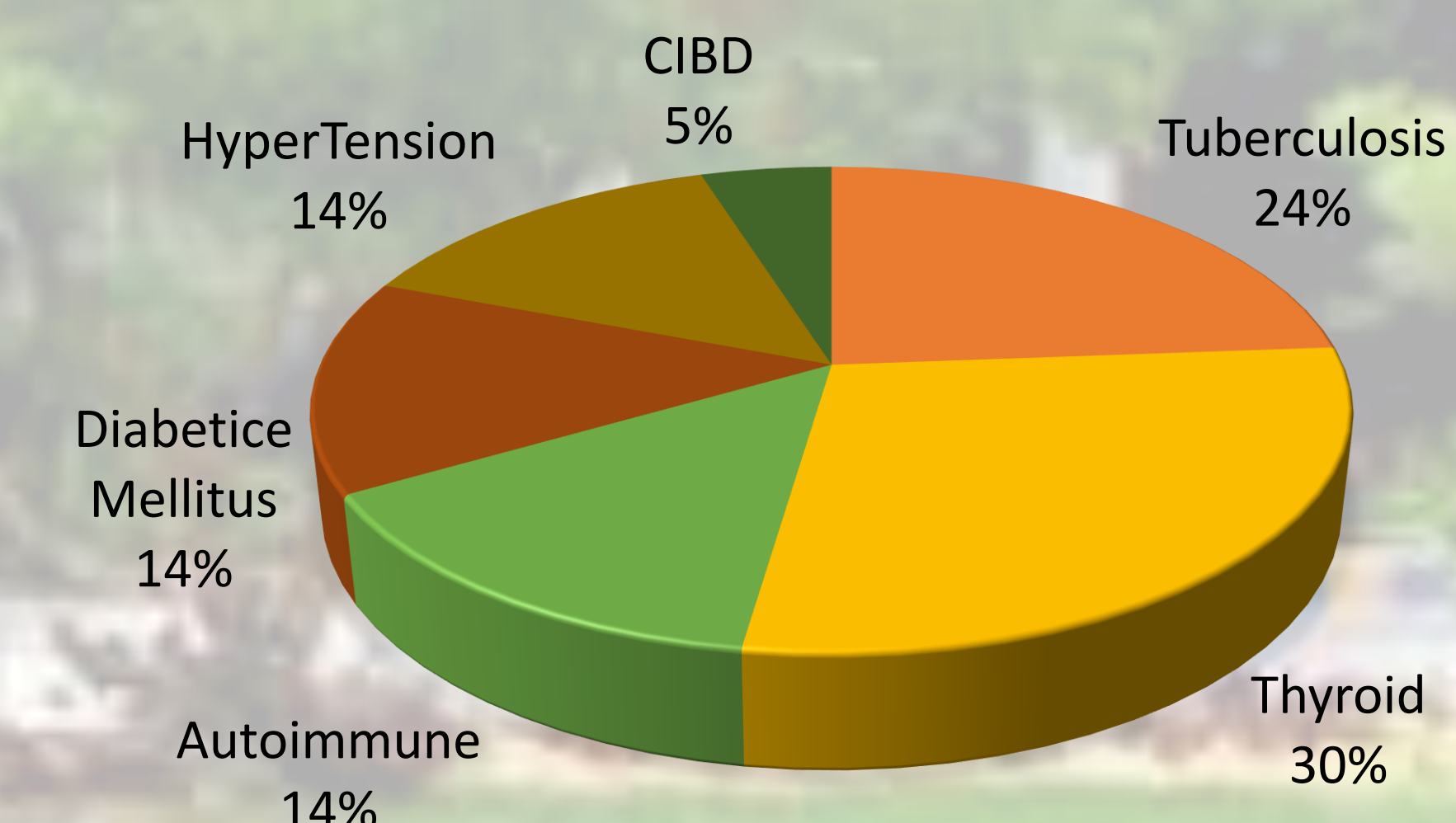


CHART 2. MEDICAL DISORDERS



CONCLUSION

Increasing incidence of POI is a serious physical and mental health concern in females of reproductive age. Early identification of related factors and prompt diagnosis and treatment of medical conditions may prevent or delay the onset.

KEY WORDS

Premature menopause, ovarian insufficiency, secondary amenorrhea

AUTHORS SHEHLA ARIF, RIFFAT JALEEL