Evaluating the prevalence, management, and the psychosocial impact of premature ovarian insufficiency on patients attending an Academic Hospital Reproductive Endocrine Clinic.

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Abstract:

Context: To assess the prevalence, etiology, and management of patients with premature ovarian insufficiency in the Reproductive Endocrine Unit at Tygerberg Academic Hospital, Cape Town, South Africa.

Primary Objective: To measure the prevalence of premature ovarian insufficiency (POI).

Secondary objective: To determine the etiology, review the management process and approach and to assess the impact of the diagnosis on patients with POI.

Design: Cross-sectional study.

Setting: Reproductive Endocrine Clinic in an academic hospital.

Patients: Patients living with a diagnosis of POI.

Materials and methods: Patients interviews, review of medical records including bone scans, clinical evaluation of patients as they present at the clinic. The study was undertaken over 12 months from August 2016 to July 2017.

Main Outcome Measure: The prevalence of POI in our setting.

Secondary Outcome Measures: The management of POI, and impact of the diagnosis on the women.

Results: There were 47 patients living with a diagnosis of POI and the total number of all patients seen during this period at the above clinic was 561. The prevalence of POI in our setting is 8,4% (Confidence interval 6.28%-11.06%).

The etiology of POI in 32% of the patients was idiopathic, 19% genetic syndromic disorder, all of which were Turner Syndrome, 10% were non-syndromic genetic disorders. A familial disorder was found according to family history and accounted for 2% of the causes.

Auto-immune causes accounted for 6%, infective causes 6%, cancer and chemotherapy 6%, obstetric complications 6%, iatrogenic 4% and endometriosis 2%.

A dual energy X-ray absorptiometry (DEXA) scan was done of which 32% had osteopenia, 11% had osteoporosis 21% patients a DEXA scan was requested but not done. Patients with normal DEXA scans were re-assessed 5 years later and patients with osteopenia and osteoporosis were re-assessed every 2 years while on treatment. Eighty-one percent (81%) of patients with osteoporosis were treated with bisphosphonates.

There were 55% of patients with depression and they were treated with various antidepressants.

Conclusions: The prevalence of POI in our clinic is reported to be 8.4%, which is much higher than the prevalence quoted in literature of 1%. This large difference may be due to a bias caused by a smaller sample size relative to the total number of patients seen. All patients received the standard treatment protocol and various specific treatment modalities.

Keywords: Premature ovarian insufficiency (POI), amenorrhoea, infertility, genetic, psychosocial.