ABSTRACT

Premature Ovarian Failure (POF) is the occurrence of amenorrhea before the age of forty in conjunction with raised level of follicular stimulating hormone (FSH) above 40mIU/ml affecting approximately 0.9% -3% of the female population. Anti Mullerian Hormone (AMH) it's a glycoprotein that belongs to the transforming growth factor-β superfamily AMH expression can first be observed in primary follicles, and is strongest in pre-antral and small antral follicles. Heavy metal poisoning (lead and arsenic) are one of the most a etiological factors of POF. Epidemiological and animal studies have illustrated that trace metals such as lead, cadmium and mercury have the potential to disrupt ovarian function. From high to low doses of lead exposure, Aim of the study to measure AMH and plasma lead in patients of POF and the normal Women. A hundred women before the age of forty included in this cross sectional study, 50 of them complaining from POF; primary or secondary amenorrhea associated with serum follicular stimulating hormone (FSH) above 40mIU/ml and another 50 normal women with regular menses and serum FSH below 10MIU/ml, serum AMH and plasma Lead were measured and These variables were compared. We evaluated the variables by using the independant t-Test for quantitative data to correlate the significance Results: There was statistically significant difference between the control & case group as regards to serum AMH and plasma Lead. Conclusion: AMH is a good marker for the ovarian reserve. Lead one of the heavy metals that affecting the ovarian function and increasing the incidence of POF.