

Study of determining serum anti mullerian hormone and its affecting factors in infertile women undergoing IVF referring to infertility center of Ardabil University of medical sciences

Abstract

Background: Infertility means inability of pregnancy after one year of natural continuous intercourse, not using any prevention which is one of the most important problems in every human societies. The average rate of infertility in different societies is been estimated to be 8-12%.

Aim:The aim of this study is to determine the level of AMH in IVF using infertile patients referring to the infertility center of Ardabil University of medical sciences and effective factors. We hope that the results of this study makes a positive step in diagnosis, treatment and prevention in these patients.

Methods and materials: The current study was a cross-sectional one which were done using library and field methods. A number of 170 women with the diagnosis of infertility referring to the infertility clinic of Ardabil Alavi hospital during 1398 were enrolled randomly in the study and their clinical data including demographic, anthropometric and hormone levels were gathered and analyzed using SPSSv22 software.

Results: Mean age of studied women were 31.7 ± 4.68 years. the age was compatible with normal distribution curve. Mean AMH level in the patients was 3.35 ± 2 ng/ml. Analysis of the data using pearson correlation showed a strong association between two indices of age and AMH level ($r=0.68$, $p<0.001$). Analysis by pearson correlation showed that although it seems that with BMI increase, the level of AMH declines but this association was not statistically significant ($r=-0.102$, $p=0.185$). in women with the complaint of secondary infertility, prevalence of AMH deficiency was significantly lower than other women ($p=0.045$). There was no difference in AMH levels between regular and irregular monthly menses ($p=0.275$).

Conclusion: Finally it can be concluded from our study that increase of age is one of the main factors in AMH levels. Also, the deficiency of this hormone can be a cause in secondary infertility.

Keywords: Anti-Mullerian hormone, Infertility, Pregnancy