

Abstract

Title: Celiac disease in unexplained infertility among couples referred to private clinics in Ardabil from October 2010 to May 2011.

Background: A wide range of factors may cause infertility; however, up to 20% of infertile couples have unexplained infertility. In these cases abnormalities are likely to be present but not detected by current methods.

Celiac disease has been considered in the etiology of unexplained infertility.

Celiac disease has been known to manifest itself in various forms, such as miscarriages and infertility. By considering young population of Iran and the 10- 15% prevalence of infertility in young couples, this study was conducted to investigate any association between unexplained infertility and celiac disease.

Methods: Infertile couples referred to 4 private clinics were recruited in the study. Inclusion criteria were normal spermogram, hystrosalpyngography, and regular menstruation. Serologic test were carried to measure total serum IgA and IgA anti TTG. Those subjects with positive serology underwent endoscopy and 6 biopsies were taken from second and third parts of duodenum.

Specimens were pathologically studied.

Results: A total of 100 couples were included in the study. 14 subjects were celiac seropositive, of whom 11 were pathologically confirmed. Of these patients 7 were female and 4 male with no gender difference. Our finding shows that prevalence of celiac disease in infertile couples was significantly higher than those reported in general population (1per 104 person) (p value 0.044).

The most common complaints among patients were abdominal pain and fluctuation (90.9%) and anemia (42.9%) . However no significant difference observed in weight, height, age, menstruation dysfunction and miscarriage between celiac patients' and the control group.

Conclusion: The prevalence of celiac disease in infertile couples with unknown etiology was significantly higher than the general population.

Therefore, screening of celiac disease in these couples might be helpful.

Keywords: Unexplained infertility, Celiac disease, IgA anti tTG.