Seroepidemiology of celiac disease among blood donor in Golestan province

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Abstract

Background&Objective: Celiac is a digestive disease. In this disease, small bowel is damaged and the absorption of nutrients are adversely affected. These patients do not absorb gluten. There is probably a correlation between esophagus cancer and celiac. The aim of this research was to study the seroepidemiology celiac disease in this area with high prevalency of esophagus cancer.

Materials&Methods: This research was a descriptive study, which was performed on blood donors in Golestan province during the year 2005-06. blood samples were taken from 2547 subjects. tTG-IgA determination were carried out using EIISA technique, the titre<4U/ml, 4-10U/ml and >10Um/l were considered to be as negative, weakly positive and positive respectively. EMA antibody assessment were carried out on all sample population with more than 4U/ml, using IFA method.

Results: 28 subjects (1.1%) had tTG-Ab positive test, out of this number 18 subjects (0.7%) were weakly positive and 10 persons (0.4%) were considered to be positive. EMA test were positive in 70% of subjects with tTG positive results. There was not any significant meaning between positive tTG test and ethnicity from weakly positive tTG, 15 subjects (83.3%) and 3 subjects (16.7%) were male and female respectively. The entire tTG positive were male subjects.

Conclusion: In regard to high prevalency of esophagus cancer in the region and the relation of celiac disease with above cancer, it seems necessary to look more seriously at the celiac disease.

Key Words: Antiendomysial antibodies- Tissue transglutaminase- Celiac- Golestan- Esophagus cancer