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Antigliadin antibody in sporadic adult ataxia

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Keywords
Celiac Disease-Idiopathic Ataxia-Gluten Ataxia-Prevalence

Abstract

Background: The most common neurologic manifestation of gluten sensitivity is ataxia, which accounts for up to 40% of idiopathic sporadic ataxia. Timing of diagnosis of gluten ataxia is vital as it is one of the very few treatable causes of sporadic ataxia and causes irreversible loss of Purkinje cells. Antigliadin antibody (AGA) of the IgG type is the best marker for neurological manifestations of gluten sensitivity. This study was conducted to measure the prevalence of gluten ataxia in a group of Iranian patients with idiopathic ataxia.

Methods: For 30 patients with idiopathic cerebellar ataxia, a questionnaire about clinical and demographic data was completed. Serum AGA (IgA and IgG) and antiendomysial antibody (AEA) were assessed. Gluten ataxic patients underwent duodenal biopsy. Magnetic resonance imaging was done for all patients to see if cerebellar atrophy is present.

Results: Only 2 patients had a positive IgG AGA (6.7%) who both had a positive AEA while none of them showed changes of celiac disease in their duodenal biopsies. Only presence of gastrointestinal symptoms and pursuit eye movement disorders were higher in patients with gluten ataxia.

Conclusion: Prevalence of gluten ataxia in Iranian patients with idiopathic ataxia seems to be lower than most of other regions. This could be explained by small sample size, differences in genetics and nutritional habits and also effect of serologic tests in clinical versus research setting. Further researches with larger sample size are recommended.

Introduction

Celiac disease, also known as gluten-sensitive enteropathy, is an immune mediated disorder in

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