Coeliac Disease in Turner Syndrome More Frequent Than Expected

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<u>INTRODUCTION</u>: The risk of developing coeliac disease (CD) is higher in Turner syndrome (TS) than the general population, and screening has been recommended in asymptomatic individuals known to have an increased risk of developing the disease.

<u>OBJECTIF</u>: In light of this recommendation, the aim of the study was to assess prevalence of celiac disease in Turner syndrome.

<u>PATIENTS AND METHODS</u>: Serological screening of coeliac disease were performed in 85 children and adolescent with Turner syndrome during the last 3 years (since 2015). Serological investigations were repeated yearly, and the results of screening of new patients were completed.

<u>**RESULTS:</u>** Positive serologic results were found in nineteen 19 of 85 patients (22%). Intestinal biopsy was applied in all cases. Coeliac disease was revealed by histologic analysis in 12 cases - 12/85 (14%).</u>

TABLE 1KARYOTYPIQUE REPARTITION.

Karyotype	MONSOMY	45X/46XX	ISOXq	STRUCTURE ABNORMALITY	TRIPLE X	With Y	TOTAL
Ν	37	20	18	5	2	3	85

DISCUSSION

The prevalence of celiac disease in TS remains higher than that of the general population estimated at 1% in European countries [1]. Mortensen and al in 2009 [2],with 106 patients studied (mean age of 36 years) show 19 patients with a positive serology that is 18% of the group. This prevalence does not reflect the prevalence reported by Bonamico in Italy in 2002 on 389 patients TS (aged between 7 and 38 years and a median of 17 years) was 6.4%, and 25 patients with positive biopsy [3].



22%

■ NEGATIVE SEROLOGY FOR COELIAC DISEASE

POSITIVE SEROLOGY FOR COELIAC DISEASE

Graph 1 Results of serologic screening.

Bonamico too on a smaller series of 37 patients in 1998 had found a prevalence of 8.1%; other small series had a lower prevalence between 2.2 and 5% [4].

The frequency of celiac disease in our series with 22% positive serology is similar to the results of the Mortensen study [2].

<u>CONCLUSION</u>: The prevalence of celiac disease in Turner syndrome patients observed in the present study is quite high and seems to indicate that the connection between these disorders can not be coincidental. Their cases and the available data from the publications indicate that screening of coeliac disease in patients with Turner syndrome should be performed and intestinal biopsy is recommended in positive cases.



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Growth and syndromes (to include Turner syndrome)

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