Prevalence, Time Trend and Predictors of Celiac Disease in Type 1 Diabetes

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Background
- Celiac disease is common in type 1 DM
- Symptoms of Celiac Disease masked
- Screening protocols unclear

Objective
To Study the prevalence, predictors and clinical profile of celiac disease in type 1 DM

Subjects & Methods
- 208 children with type 1 DM (106 boys; mean age 8.9 ± 4.3 years)
- Mean follow-up 4.9 ± 3.7 years
- TTG IgA at diagnosis & annually; biopsy for positive serology

Study Design
Retrospective Study

Results

Patient Enrolment

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<tr>
<th>Group</th>
<th>Prevalence</th>
<th>Diagnosed CAD before T1D</th>
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<tbody>
<tr>
<td>New T1D (N=208)</td>
<td>35 (16.8%)</td>
<td>3 before diabetes onset</td>
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<tr>
<td>Positive TTG (N=33)</td>
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<td>Negative TTG (N=175)</td>
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<td>Biopsy Proven CD (N=15)</td>
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<td>Biopsy Non-Dense (N=4)</td>
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<td>TTO &gt; 250 KU/L (N=3)</td>
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<td>Follow-up TTG* (N=57)</td>
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Time Course of Onset

Celiac disease identified in 35 (16.8%)

At Diagnosis
Mean age at diagnosis and gender was comparable in both the groups

During Follow-up
Mean age at diagnosis and duration of T1D were comparable in both the groups

Conclusion

- Need for universal screening due to lack of identifiable risk factors at diagnosis of type 1 DM
- Usual onset within 5 years of diagnosis
- Compromised growth and glycemic control predicts celiac
- Periodic screening mandatory to prevent impact on growth and glycemic control

References