

## Frequency of Celiac Disease and Spontaneous Normalization Rate of Celiac Serology in Children and Adolescent Patients with Type 1 Diabetes.

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**Background :** The prevalence of celiac disease (CD) varies between 1% and 10% in patients with type 1 diabetes mellitus (T1DM).

**Objective :** This study was aimed to determine the frequency of spontaneous recovery of celiac serology and the biopsy-proven CD (BPCD) frequency in patients with T1DM.

**Methods:** The data of 668 patients with available celiac serology tests from a total of 779 patients who were followed for the last 10 years with the diagnosis of T1DM were retrospectively evaluated.

# ACADEMIC P.E.A.R.L.S

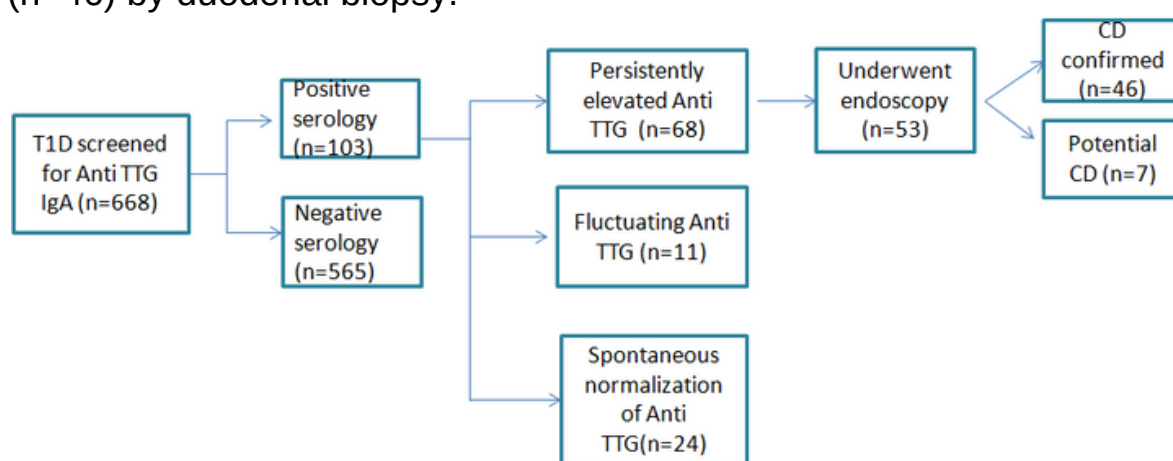
Pediatric Evidence And Research Learning Snippet



## Celiac Disease & Diabetes

### RESULTS

- The study included 779 patients, 367 (47.1%) male and 412 (52.9%) female with T1DM. Of those 668 (85.75%) patients had at least one anti-TTG IgA test result.
- Celiac serology was positive in 15.4% (n=103) and Celiac disease was diagnosed in 6.9% (n=46) by duodenal biopsy.



- All biopsy proven CD had a high titre of Anti Celiac antibodies (> 10 times upper limit of normal).
- Majority (76.1%) patients with Biopsy proven CD were diagnosed at the time of the diagnosis of T1DM and 21.7% within following five years.
- All children with spontaneous normalization of Celiac antibodies did so within a mean duration of 9 months (3-24 months) and all except one had low antibody titres.
- 23%(n=24) of Celiac antibody positive children at diagnosis had normalization of antibody level on follow-up.

**Conclusion:** Spontaneous normalization of Celiac serology can occur in a significant proportion of children with Type 1 diabetes. Serological follow-up of asymptomatic and mildly elevated anti-TTG IgA levels in children with Type 1 diabetes might be a more appropriate strategy rather than an immediate biopsy. Regular follow-up of celiac serology in patients with spontaneous normalization is also warranted.

### EXPERT COMMENT

**“In Type 1 diabetes, a high rate of spontaneous normalization of celiac serology as demonstrated in this study suggests performing serological follow-up instead of immediate duodenal biopsy or Gluten Free Dietary therapy, especially in patients with asymptomatic and mild anti-TTG IgA antibody levels.”**

**Dr Deepa Anirudhan**

MD,DNB, Fellowship in Paediatric and adolescent Endocrinology  
Associate Professor of Paediatrics,  
Govt Medical College, Thrissur , Kerala

With warm regards,

**DR MANINDER S  
DHALIWAL**

**DR. PIYUSH GUPTA**  
IAP NATIONAL  
PRESIDENT 2021

**DR REMESH KUMAR R.**  
IAP PRESIDENT  
2022

**DR BAKUL JAYANT  
PAREKH**  
IAP PRESIDENT  
2020

**DR G.V.  
BASAVARAJA**  
HON. SECRETARY  
GEN. 2021 - 22

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pedpearls@gmail.com

### Reference

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