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Screening for celiac disease in children with type 1 diabetes

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Celiac disease is an intestinal chronic inflammatory and autoimmune disease that develops because of interplay between genetic, immunologic, and environmental factors. *Type 1 diabetes mellitus* (T1DM) and (CD) tend to co-exist due to similar underlying genetic predisposition. Failure to recognize CD in patients with T1DM predisposes them to complications. This was a retrospective analysis of the records of the patients presenting with gastrointestinal symptoms visiting a tertiary care hospital in north India. Data from 200 subjects having serum IgA anti-tissue transglutaminase (anti-tTG) levels >7 U/ml was analyzed. Subjects were divided into 3 groups according to their age i.e. Group I (upto 12 years of age), Group II (13-17 years) and Group III (≥ 18 years). IgA anti-tissue transglutaminase was done using *Enzyme linked immunosorbent assay* and patient's history was taken for other information. Among 200 subjects with TTG >7 U/ml, 91 were found to be in Group I, 23 in group II and 89 in group III. Out of 91 subjects in group I, 24 subjects were found to be type I diabetic that accounts for 26%. Similarly in Group II, there were 5 subjects out of 23 with type I diabetes (21%) and in group III, the number was seven out of 89 (7%). On further analyzing group I, we found that out of the 24 children with DM type I and celiac disease, 17 subjects were females and seven subjects were males. DM1 was significantly overrepresented in celiac disease so, Clinicians should be aware that the double diagnosis of celiac disease and DM1 predisposes the patients to severe co-morbidities.

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