

**#0104**

**Diabetes type 1, HLA genes and celiac disease: an Algerian pediatric cohort**

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**Abstract**

**Background:** Type 1 diabetes mellitus (T1D) CD is closely associated with Celiac disease (CD); and the world's highest prevalence of this association is reported in Algeria!

We report the main epidemiological characteristics in an Algerian pediatric cohort of T1D and CD along with their HLA risk genes.

**Material and method:** We performed a retrospective analysis of a cohort of diabetic children with celiac disease for whom a genetic test (HLA) has been performed

**Results:** We collected 09 children with T1D and Celiac disease, 2 boys and 7 girls

In this cohort, all patients presented the HLA risk genes DQ2 and/or DQ8

All these cases (DT1 +MC) depict 2 common clinical characteristics:

1. A diagnosis through a systematic annual serological screening
2. An onset of diabetes preceding that of CD

**Discussion:** The female prevalence, as for our series, is quite common: an Italian cohort of 4,322 children reported a risk almost twice as high in girls than in boys.

The majority of T1D with CD children are those diagnosed with diabetes and secondarily diagnosed with CD

**Conclusion:** Children and adolescents with T1D are at high risk of developing CD, mainly due to their common genetic characteristics. Our study is still recruiting patients to unveil any potential clues or phenotype-genotype correlation