

Type 1 Diabetes & Related Autoimmune Disorders

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INTRODUCTION

Pediatric diabetes is a complex, multigenic condition frequently associated to many other autoimmune disorders that may interact negatively its management.

We report the preliminary results of a pediatric, type 1 diabetes cohort

MATERIAL & METHODS

We performed a retrospective, single-center study in a Tertiary University Hospital, Pediatrics Department, Setif University Hospital, Algeria

Medical records of children < 16 years with type 1 diabetes were scrutinized and all autoimmune associations were reported up to October 2018.

RESULTS & DISCUSSION

We enrolled 108 diabetic patients. 11 patients had confirmed auto-immune disorders, with an estimated frequency of autoimmune association $\approx 10.18\%$. There was a “Pot-pourri” of conditions: 05 Celiac disease, 04 Thyroid autoimmune dysfunctions, 01 Psoriasis and 01 Immune Thrombocytopenic Purpura

Celiac disease & Thyroid disorders accounted for >80 % of the total autoimmune associations

Non- surprisingly, Celiac Disease (CD) was the most frequent associated autoimmune condition; reported in 06 diabetic children with positive serology and histology. Actually, CD is the major autoimmune association with pediatric diabetes worldwide, and especially in the Maghreb countries where the highest frequency of CD-Diabetes association was ever reported (16% in Western Algeria)

In sum, this peculiar increased prevalence of autoimmune diseases is -at least partially- explained by both a genetic background and a “Westernized” diet

CONCLUSION

Autoimmune associations in type 1 diabetes are a mere truism...

Screening should focus on the expected frequency of each condition, and is mandatory for CD and dysthyroidism.

Some clinical signs may arise suspicion of such associations and lead to diagnosis (*i.e.* unexplained short stature, fluctuating glycaemia and hepatic involvement)