



GRAVES' DISEASE IN CHILDREN WITH T1DM: A REPORT OF THREE CASES

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BACKGROUND

Type one diabetes mellitus (T1DM) is an autoimmune disorder that is yet the most common type of diabetes in children and adolescents. Therefore, children and adolescents with T1DM are at increased risk for developing other autoimmune diseases including Graves' disease.

OBJECTIVES

To describe clinical characteristics and laboratory finding in three Vietnamese patient with T1D and Grave's disease

METHODS

Cases series study:

Clinical features: polydipsia, polyuria, weight lost, palpitations, anxiety, goiter, exophthalmus were collected. Laboratories finding: glucose, insulin,c-peptide, HbA1C, T3, FT4, TSH, anti TPO, anti TG, TrAb, ...were studied.

The patients include of 3 T1DM patients with *Grave's disease* are treated in Vietnam National Children's Hospital

RESULTS

Table 1. Clinical characteristics and laboratories of patients

No	Sign and symptoms	Case 1	Case 2	Case 3
1	Gender	Female	Female	Female
2	Age	13	6	3.5
3	Polydipsia	+	+	+
4	Polyuria	+	+	+
5	Weight loss	5kg/months	3 kg/2 weeks	1kg/week
6	BMI	13.7	11.6	8.9
7	Diffuse Goiter	Grade 3	Grade 3	Grade 3
8	Exophthalmus	+	+	+
9	Heart rate (bpm)	107	105	110
10	Glucose (mmol/l)	21.8	24	18.98
11	HbA1C (%)(normal 4-6.4)	11.2	8.68	10.14
12	T3 (nmol/l)	5	4.02	4.81
14	FT4 (pmol/l)	51	119.7	150
15	TSH (mUI/l)	0.005	0.000	<0.01
16	TrAB (UI/ml)(normal 1-1.58)	18.5		11.5
17	Anti-TPO (UI/ml) (normal <34)		2108	364.1
18	Anti -TG (UI/l)(normal <115)	172.2	1696	1662



Figure 1. case 1



Figure 2. Case 2



Figure 3. Case 3

CONCLUSIONS

The relationship between thyroid disorders and diabetes mellitus is characterized by a complex interdependent interaction. Insulin resistance states may increase thyroid gland nodularity and coexisting diabetes may increase risk of visual loss in patients with Graves' disease.

All patients with T1D should be screened for hyperthyroidism to have early diagnosis and treatment.

References

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