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The authors have nothing to disclose

15-year old girl with APS type IIIc, with post-thymectomy remission– case report.

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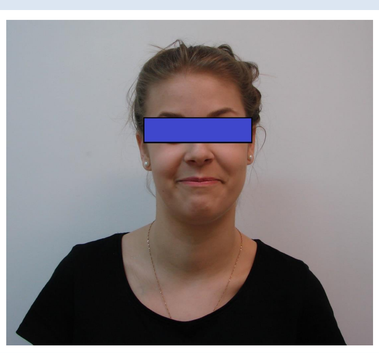
INTRODUCTION AND OBJECTIVES

Autoimmune polyglandular syndromes (APS) is a group of heterogenous conditions characterized by the association of at least two organ-specific disorders, concerning both endocrine and non-endocrine organs. On the basis of the clinical features, they are divided into four main types. Type III is defined as the combination of autoimmune thyroid disease and other autoimmune condition – divided into subtypes A, B and C. Other combinations of autoimmune endocrine diseases are classified as type IV.

We describe a female patient – with the family history of thyroid diseases in her mother (hyperthyroidism) and aunt (hypothyroidism), and Addison's disease in her grandmother – who has simultaneously developed the symptoms of autoimmune thyroid disease with the clinical picture of hyperthyroidism and myasthenia at the age of 15. The autoimmune thyroid disease (Graves' disease as indicated in the further laboratory investigation) was recognized about 2 months before myasthenia.

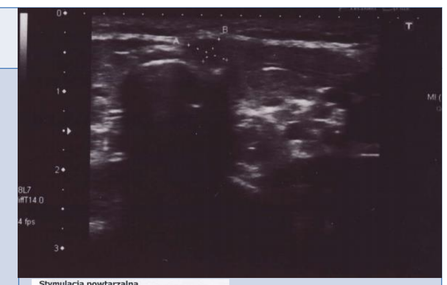


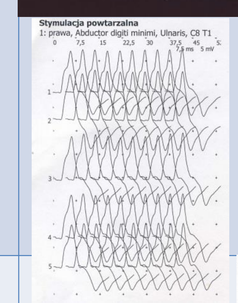
METHODS

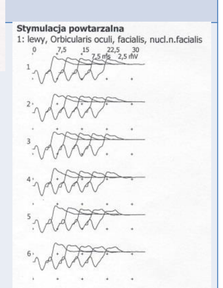
Co-existance of those diseases allow us to diagnose APS type IIIc. After a few months we have discovered positive GAD-Ab (whilst blood sugar levels remain normal and without DM symptoms). No evidence of other autoimmune condition was observed.

In this patient the standard GD - tiamazol and propranolol (untill the MG diagnosis) and MG treatment (immunoglobulines, pyridostigmine) was administered. When the CT scan revealed thymus enlargement, thymectomy was performed.

	Symptoms	**Test results**
Nov 2014	weight loss, tremor, decreased physical activity tolerance, tachycardia, swallowing difficulties, voice change, irritability, emotional liability,	TSH <0,005 uIU/ml (L) fT3 6,55 pg/ml (H) fT4 2,33 ng/ml (H) ATG (+) TPO (+) TRAb (+) Thyroid enlarged, hyperechoic, increased color- and power- doppler flow EMG stimulation test –negative
Jan 2015	some of the previous symptoms have disappeared new symptomes ocurred: ptosis, facial numbness	EMG stmulation test – positive MUSK-Ab (+) AchR-Ab (+) Enlarged tymus discovered in CT-scan







RESULTS

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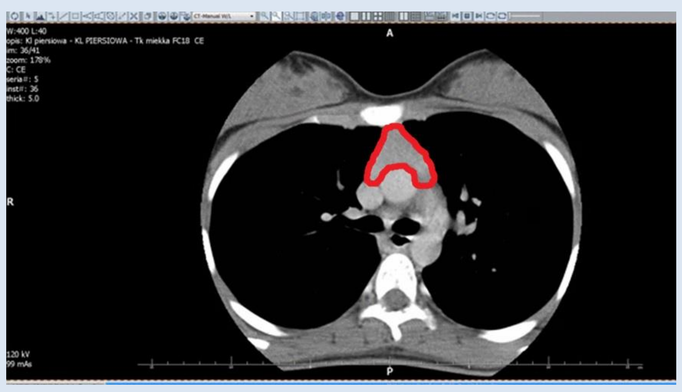
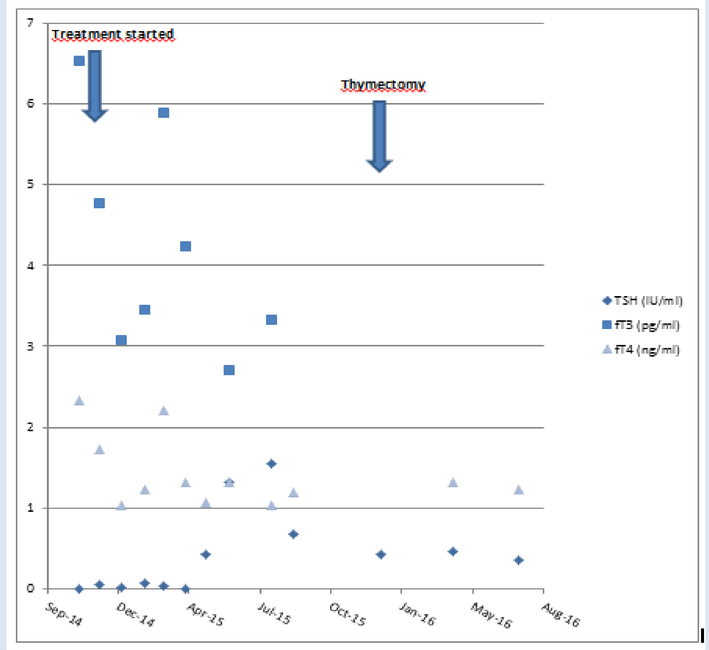
CT-scan presenting enlarged thymus

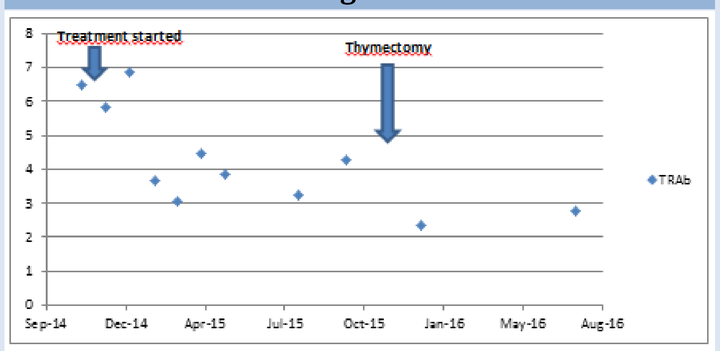


Thyroid hormones during the treatment



TSAb – 277 (>150 = positive) **TBAb –10** (>30 = positive)

TRAb during the treatment



Other Antibodies

Antibodies	**Jan 2015**	**Nov 2015**
GAD Ab - neg	(-)	**(+)**
IA-2 Ab	(-)	(-)
Insulin Ab	(-)	(-)
ZnT8 Ab	(-)	(-)
21-OH Ab	(-)	(-)
AcHR Ab	**(+)**	**(+)**

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CONCLUSIONS

Co-existence of miasthenia and Grave's disease caused not only diagnostic difficulties, but also a number of therapeutic implications

After the surgery we observe not only MG remission, but a significant decrease of TRAb as well.

MG therapy (including thymectomy) helped treating co-existent disease allowing to deal with GD only pharmacologically. That indicates the possibility to achieve post-thymectomy remission of not only MG but other APS components.

Our patient's case confirms that, even in already diagnosed APS, the organ-specific Ab screening can help identify other latent and subclinical autoimmune diseases before patient develops clinical symptoms.

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55ESPE 717--P2
Endocrinology and Multisystemic Diseases
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DOI: 10.3252/pso.eu.55ESPE.2016
Poster presented at: ESPE 2016 PARIS