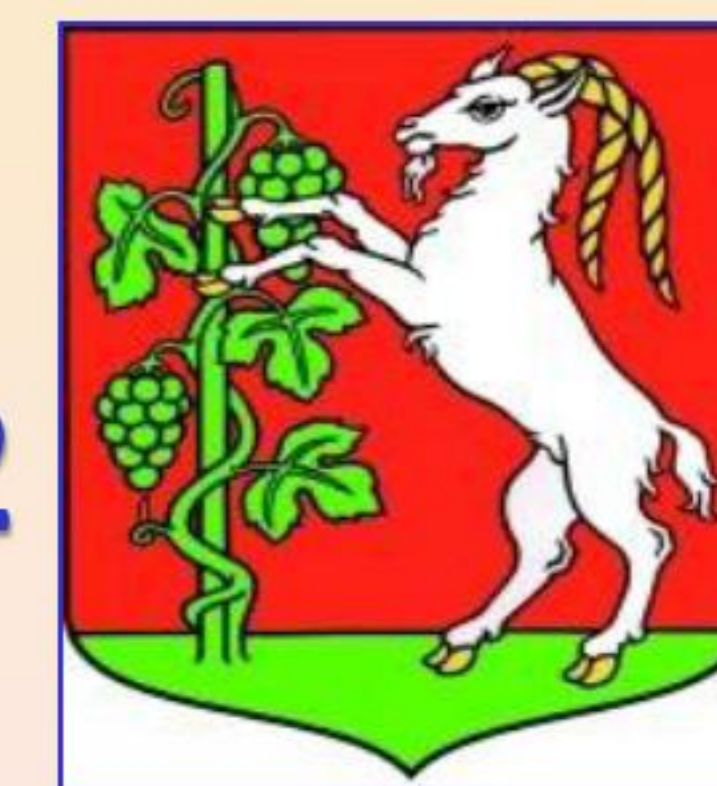




# Severe hyponatremia in the course of autoimmune polyglandular syndrome type 2 of atypical clinical picture



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**Introduction.** Severe hyponatremia is defined as the blood sodium concentration below 115 mmol/l. It is rarely recognized in the course of autoimmune polyglandular syndrome type 2 (APS t.2). Coexistence of Addison's disease and connective tissue diseases is also observed very rarely. Until now a few cases of coexistence of both Addison's disease and APS t.2 and psoriatic arthritis were described in literature.

**The aim** of the paper is to present the female patient with severe hyponatremia preceding the diagnosis of APS t.2 of atypical clinical picture.

**Case report.** A 54 year-old woman with the diagnosis of psoriasis established 10 years earlier and treated for psoriatic arthritis from 7 years. She was admitted to the emergency ward because of persistent vomiting, hyponatremia=111 mmol/l and hyperkalemia=5.4 mmol/l. For several months she observed increasing fatigue, hypotension, recurrent abdominal pain, loose stools, increased appetite for salt, progressive darkening of the skin and weight loss of 12kg/6months. Hormonal and immunologic studies are presented in a table.

**The diagnosis** of primary adrenal insufficiency and concomitant autoimmune thyroid disease with hyperthyroidism in a patient with psoriatic arthritis was established.

**Summary.** Psoriatic arthritis and thyroid disease with thyrotoxicosis are rare components of APS type 2 and hyponatremia occurs more frequently in patients with concomitant hypothyroidism.

**Conclusion.** Severe hyponatremia in our patient could be the result of a significant increase in demand for cortisol caused by thyrotoxicosis and the lack of opportunity to increase its production by the adrenal cortex.

Laboratory studies	Results
Blood electrolytes mmol/l	Sodium: 111; 114; 119; 122 Kalium: 5,4; 5,5; 5,4; 4,8
Diurnal cortisol rhythm µg/dl	Cortisol: 3.7 ----- 2.7 1.7 -----1.6
ACTH level pg/ml	857.3 [n: 7.2-63.6]
Test with 250 µg of Synacthen	cortisol response 0.8 µg/dl
21-hydroxylase auto-antibody	1:<10 [absent]
Thyroid hormones	FT4 - 32.2 pmol/l [ n: 12-22] FT3 - 16.2 pmol/l [n: 3 - 7] TSH <0.04 IU/l [n: 0.4 - 4.9]
Thyroid antibodies	TSI - 1.8 U/l [n:<1.5] a/TPO - 4659 U/ml [n:<60] a/TG - 391 U/ml [n:<60]

