

# MULTIPLE DISEASE ASSOCIATIONS IN AUTOIMMUNE POLYGLANDULAR SYNDROMES



Anna M. Dąbrowska<sup>1</sup>, Agnieszka Zwolak<sup>1,2</sup>, Jerzy S. Tarach<sup>1</sup>

<sup>1</sup> Chair and Department of Endocrinology, Medical University of Lublin, Poland

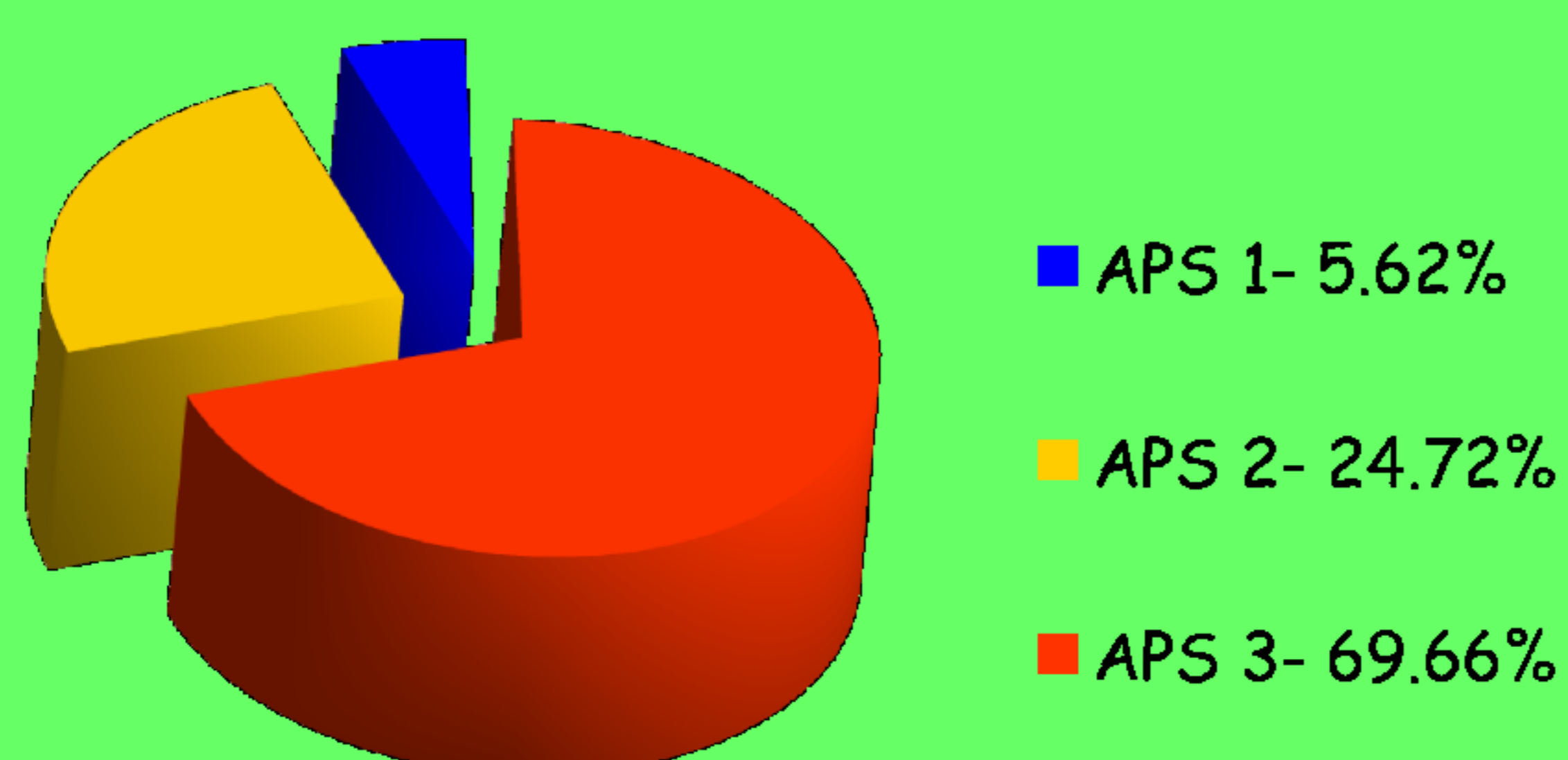
<sup>2</sup> Chair of Internal Medicine and Department of Internal Medicine in Nursing, Medical University of Lublin, Poland

**INTRODUCTION:** Autoimmune polyglandular syndromes (APS) are a heterogeneous group of disorders characterized by autoimmune activity against endocrine and non-endocrine organs. APS type depends on the combination of the diseases (APS1, APS2, APS3).

**METHODS:** The study was conducted in 89 patients (70F,19M) with APS aged mean 50.00 ± 14.80 years, treated at Endocrinology Department between 2003 and 2015. We analyzed clinical manifestations, results of laboratory tests and imaging to determine the components of APS.

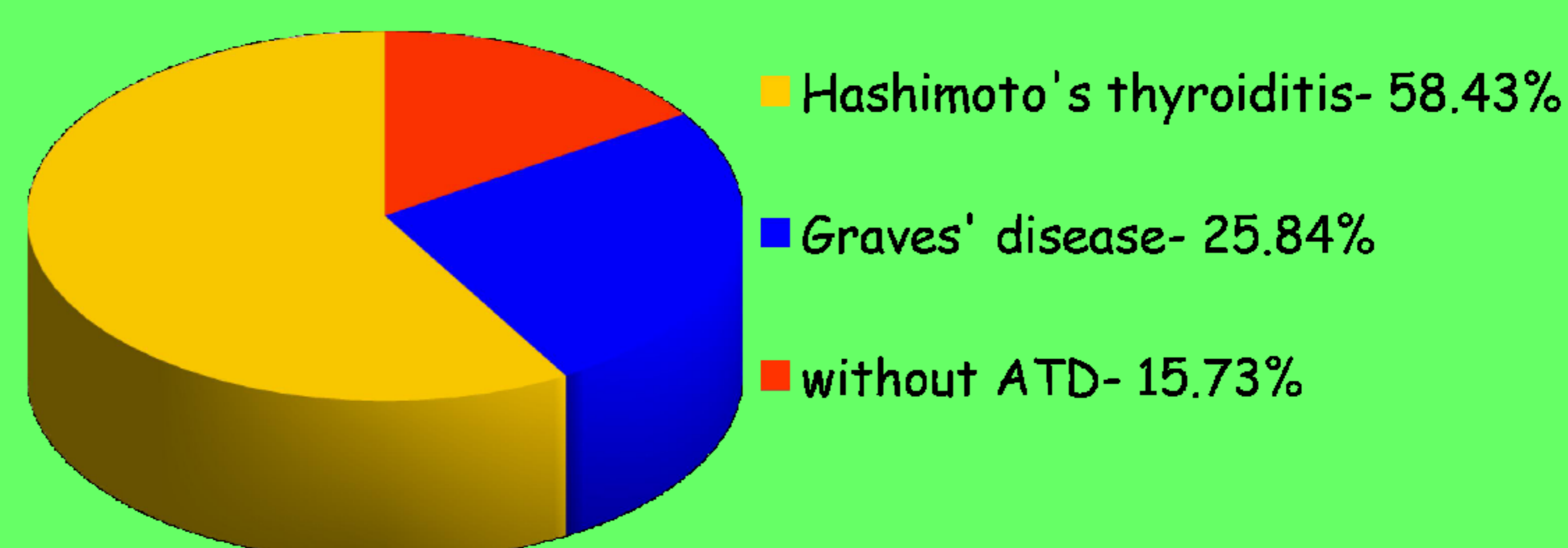
## RESULTS

FIG.1 The prevalence of syndromes in APS



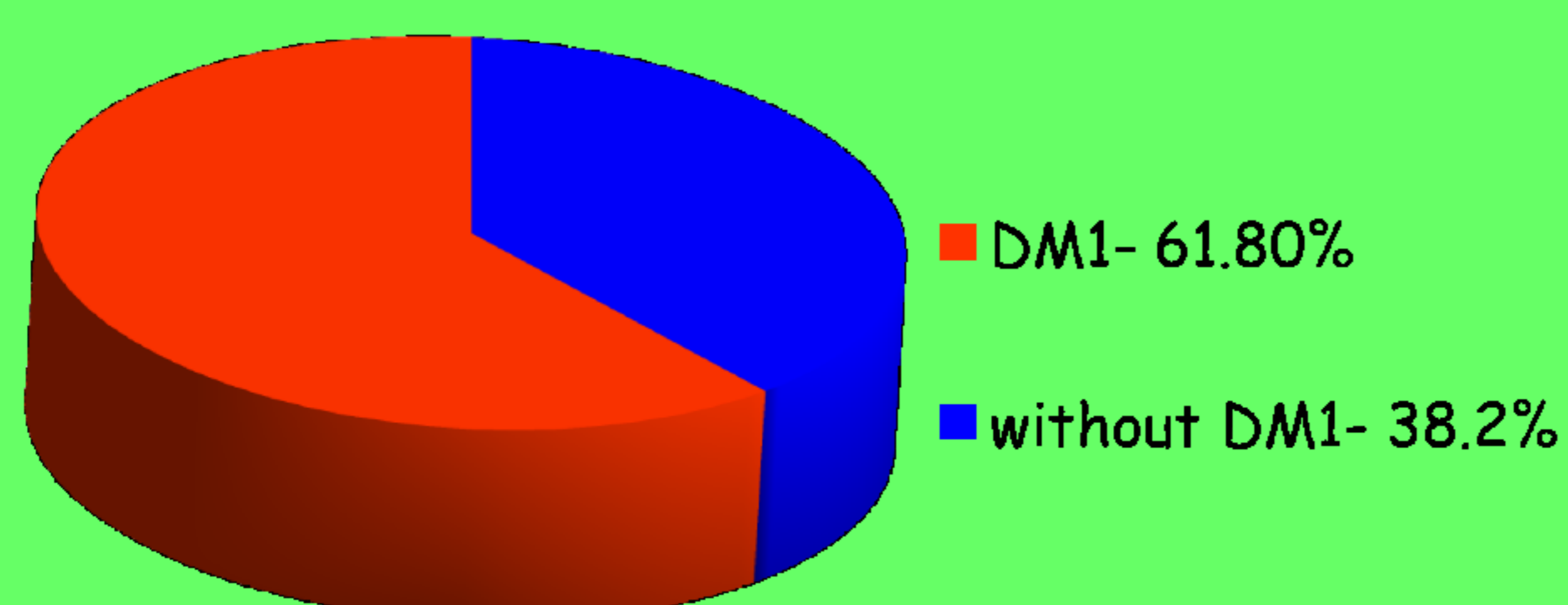
ATD were found in 84.27% of all cases with APS and in 100% with APS1, in 86.36% with APS2 and in 82.26% with APS3.

FIG 2. Autoimmune thyroid diseases (ATD)



DM1 was diagnosed in 61.80% of all participants with APS and in 20.00% with APS1, in 27.27% with APS2 and in 77.42% with APS3.

FIG.3 Type 1 diabetes mellitus (DM1)



TAB.1 Other diseases in all cases with APS

Other diseases in APS	% of all cases with APS
1. Addison's disease	29.21
2. vitiligo	17.98
3. psoriasis	12.36
4. Addison-Biermer anemia	10.12
5. alopecia areata	5.62
6. asthma	3.37
7. rheumatoid arthritis, myasthenia gravis, coeliac disease, ulcerative colitis, autoimmune hepatitis	in individuals

- In APS1, 3-6 diseases were noted, mostly the coexistence of Addison's disease and hypoparathyroidism.
- 2-3 diseases were found in APS2. Schmidt's syndrome was determined in 63.64% of patients with APS2, Carpenter syndrome-only in 2 cases. The most common diseases in APS2 were: Hashimoto's disease, type 1 diabetes, Graves' disease (72.73%, 27.27%, 13.64% respectively).
- In APS3, 2-4 diseases were found. Type 1 diabetes, Hashimoto's disease, Graves' disease were the most common disorders (77.42%, 50.00%, 32.26% respectively). The most common coexistence in APS3 was type 1 diabetes with Hashimoto's disease.

**CONCLUSIONS:** Although some diseases occur more frequently than others, it should be remembered about various APS components during follow-up such patients.

17<sup>th</sup> European Congress of Endocrinology, 16-20.05.2015 DUBLIN