# **HemaSphere**



### P1658 CLINICAL CHARACTERISTICS OF A HIGH-POSITIVE ANTIPHOSPHOLIPID SYNDROME

**Topic:** 34. Thrombosis and vascular biology - Biology & Translational Research

Sviatlana Khoduleva\*<sup>1</sup>, Igor Stoma<sup>1</sup>, Irina Novikova<sup>1</sup>, Inna Malishevskaya<sup>2</sup>, Ludmila Korotaeva<sup>2</sup>, Dmitry Novik<sup>2</sup>, Arkady Silin<sup>2</sup>

<sup>1</sup>Internal Diseases Department, Gomel State Medical University, Gomel, Belarus; <sup>2</sup>Republican Research Center For Radiation Medecine And Human Ecology, Gomel, Belarus

#### **Background:**

Antiphospholipid syndrome (APS) occupies one of the leading positions in the structure of the causes of thrombosis. The annual incidence of APS is 5 cases per 100,000 population, and the prevalence is about 40-50 cases per 100,000. According to the severity of clinical manifestations and complications, high-positive APS needs special attention.

#### Aims:

Assessment of clinical manifestations and complications of high-positive APS.

#### Methods:

72 patients with APS aged 14 to 70 years were under follow-up. The average age of patients was  $34 \pm 6.82$  years, women predominated - 73.6%. The follow-up period ranged from 6 months to 9 years. The diagnosis was verified in accordance with the Sydney classification criteria of APS (2006). Antibodies to cardiolipin and to  $\beta$ 2-glycoprotein-1 ( $\beta$ 2-GP-1) of the IgM and G classes were determined by enzyme-linked immunosorbent assay (ELISA). Plasma hemostasis indicators and lupus anticoagulant(LA)were determined using an ACL Elite pro coagulometer. High-positive APS was determined with an increase in antiphospholipid antibodies (APAB) of more than 60 IU/ml. In the presence of two (doublet) or three (triplet) types of APAB, category I was established, in the presence of one type of APAB, category II (IIa - BA; IIb - antibodies to cardiolipin; IIc - antibodies to  $\beta$ 2-GP-1). In order to exclude congenital thrombophilia, the activity of antithrombin III, proteins C and S, and the level of homocysteine were assessed; molecular genetic testing (by PCR) was carried out for the presence of thrombogenic mutations.

#### **Results:**

High-positive APS was determined in 19% of women and 47% of men with primary APS. A total of 19 patients, which accounted for 26.4% of the observation group. Among the clinical manifestations, thrombosis of various localization prevailed (68.4%): veins of the lower extremities - 23.5%; veins of the upper extremities - 7.7%; portal vein pool - 15.3%, portal vein - 15.3%. Pulmonary embolism was diagnosed in 17.6% of patients. Recurrent miscarriage was observed in 30% of women. Of the non-criteria manifestations of APS is cerebrovascular accident of the ischemic type - in 11.7% of cases; immune thrombocytopenia - 11.7%. In 52.6% of patients, secondary autoimmune complications developed within 2-9 years, among which autoimmune coagulopathy prevailed (60%). Among other complications: hemorrhagic vasculitis, glomerulonephritis, autoimmune hemolytic anemia, aplastic anemia. In 57.9% of patients, the presence of two (double) types of AFAB was detected simultaneously; in 36.8% of cases - triplet and in 5.3% of cases - category IIa was verified.

In 5.5% of cases, primary APS was accompanied by congenital thrombophilia: Heterozygous Leiden mutation (n=2) and heterozygous mutation of the prothrombin G20210A gene (n=2). Among patients with high-positive APS, congenital thrombophilia was detected in 11.5%.

Copyright Information: (Online) ISSN: 2572-9241

Abstract Book Citations: Authors, Title, HemaSphere, 2023;7(S3):pages. The individual abstract DOIs can be found at https://journals.lww.com/hemasphere/pages/default.aspx.

<sup>© 2023</sup> the Author(s). Published by Wolters Kluwer Health, Inc. on behalf of the European Hematology Association. This is an open access Abstract Book distributed under the Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) which allows third parties to download the articles and share them with others as long as they credit the author and the Abstract Book, but they cannot change the content in any way or use them commercially.

Disclaimer: Articles published in the journal HemaSphere exclusively reflect the opinions of the authors. The authors are responsible for all content in their abstracts including accuracy of the facts, statements, citing resources, etc.

## **HemaSphere**



**Summary/Conclusion:** High-positive APS was observed in 1/3 of newly diagnosed APS cases. The risk of developing this variant of APS in men is twice as high. Venous thrombosis prevailed in the clinical picture, however, high-positive APS can onset with non-criteria manifestations, such as cerebrovascular accident, immune thrombocytopenia. In half of the cases, there is a risk of developing various immunocomplex and secondary autoimmune complications that worsen the prognosis of the disease.

Copyright Information: (Online) ISSN: 2572-9241

© 2023 the Author(s). Published by Wolters Kluwer Health, Inc. on behalf of the European Hematology Association. This is an open access Abstract Book distributed under the Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) which allows third parties to download the articles and share them with others as long as they credit the author and the Abstract Book, but they cannot change the content in any way or use them commercially.

Abstract Book Citations: Authors, Title, HemaSphere, 2023;7(S3):pages. The individual abstract DOIs can be found at <a href="https://journals.lww.com/hemasphere/pages/default.aspx">https://journals.lww.com/hemasphere/pages/default.aspx</a>.

**Disclaimer:** Articles published in the journal HemaSphere exclusively reflect the opinions of the authors. The authors are responsible for all content in their abstracts including accuracy of the facts, statements, citing resources, etc.

HemaSphere | 2023;7(S3)