

Antiphospholipid syndrome

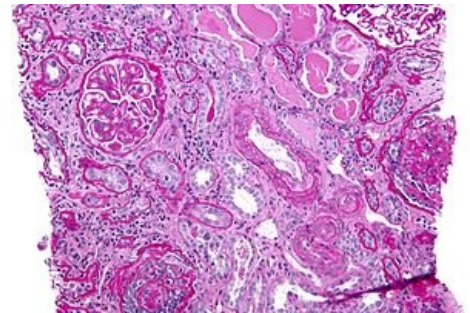
This article has been translated from WikiSkripta; the **translation** needs to be checked.

Antiphospholipid syndrome (APS) is a disorder characterized by the production of non-specific autoantibodies. These antibodies cause a **hypercoagulable state** through several mechanisms. It is one of the most commonly acquired thrombophilic states.^[1]

APS is an autoimmune disease with clinical presentation consisting of the **closing of arteries or/and veins** in any organ or tissue (deep vein thrombosis, thrombosis of cerebral sinuses, stroke, migraine, epilepsy, thrombocytopenia, hemolytic anemia, pulmonary embolism, pulmonary hypertension, livedo reticularis, purpura, heart valve disease, amaurosis, retinal thrombosis, myocardial infarction, vascular necrosis of bones, adrenal infarction) as well as pregnancy complications like spontaneous abortions mainly after the 10th week of pregnancy or preeclampsia.

The laboratory criteria for the diagnosis is the detection of at least one of these antibodies **lupus antikoagulans** (LA), **anti-cardiolipin antibodies** (aCL class IgG or IgM) or **antibodies against β 2-glycoprotein I** (anti β 2-GP I class IgG or IgM) in minimal interval of 12 weeks between individual laboratory analysis.^{[2][3]}

APS can be divided into two general forms: **secondary**, which is based on the presence of other underlying disease - most commonly systemic lupus erythematoses (SLE), and **primary** form, with undetected cause of production of antiphospholipid antibodies.^[1]



Thrombotic microangiopathy

Clinical presentation

- recurring arterial/ venous thrombosis,
- spontaneous abortion in women,
- thrombocytopenia,
- epilepsy,
- transversal myelitis,
- thrombocytopenic purpura.^[4]

Characteristic and diagnosis

- They can demonstrate also in frame of other systemic disease (SLE) → **secondary antiphospholipid syndrome** (called as **anticardiolipin**),
 - antibodies against various **phospholipids**, **phospholipid**-protein complexes,
 - spontaneously prolonged activated partial thromboplastin time (aPTT), although the state is not accompanied by the higher risk of bleeding, on the contrary; the risk of thrombotic complications is higher,^[1]
 - in some cases we can detect *lupus anticoagulans* (circulating anticoagulant factor),
 - poor function of platelets and lower number of platelets,
- **primary antiphospholipid syndrome** leads to reproductive disorders (multiple abortions).^[4]

Antiphospholipid antibodies

- **antiphospholipid antibodies against:** *phosphatidylserine*, *phosphatidylethanolamine*, *phosphoric acid*, *phosphatidylglycerol*, *phosphatidyl- β 2-glycoprotein* (a component of cardiolipin), *annexin V* (important for the diagnosis of **antiphospholipid** syndrome),
- **antibodies** IgG, IgA, IgM,
- significant factor in case of unsuccessful reproduction (IgG),
- examined by ELISA test,
- **phospholipid** antigens are the component of all cell membranes, including cardiolipin etc.^[4]

Therapy

- Antiagregants (antiplatelet drugs),
- acetylsalicylic acid,
- heparin,
- corticosteroids.^[4]

Links

Related articles

- Autoprotilátky

External Links

- MUDr. Alena Buliková, prof. MUDr. Miroslav Penka, CSc.: Antifosfolipidový syndrom (<http://www.solen.cz/pdfs/int/2006/05/08.pdf>)

References

1. HLUŠÍ, A a V KRČOVÁ. Antifosfolipidový syndrom. *Interní medicína pro praxi* [online]. 2003, roč. -, vol. 9, s. 434-436, dostupné také z <<http://www.solen.cz/pdfs/int/2003/09/02.pdf>>.
 2. ↑ Sanna et al., 2003; Roussel et al., 2000; Cervera et al., 2002
 3. ↑ Skočit nahoru k:a b NYTROVÁ, P, H KALISTOVÁ a I KOVÁŘOVÁ, et al. Antifosfolipidový syndrom aneb syndrom, jenž může napodobit roztroušenou sklerózu. *Neurologie pro praxi* [online]. 2009, roč. 10, vol. 1, s. 54-57, dostupné také z <<http://www.solen.cz/pdfs/neu/2009/01/12.pdf>>.
 4. ↑ Miyakis et al., 2006
 5. ↑ Skočit nahoru k:a b c d HOŘEJŠÍ, Václav a Jiřina BARTŮŇKOVÁ. *Základy imunologie*. 3. vydání. Praha : Triton, 2008. 280 s. ISBN 80-7254-686-4.
- 1.
 2. Miyakis et al., 2006
 - 3.
 - 4.