

SURGICAL OUTCOMES OF PATIENTS WITH ANTIPHOSPHOLIPID SYNDROME AFTER PULMONARY ENDARTERECTOMY

Abe S, Ishida K, Masuda M, Ishizaka T, Kohno H, Tamura Y, Watanabe M, Fukazawa Y, Matsumiya G.

Department of Cardiovascular Surgery, Graduate School of Medicine, Chiba University
Department of Cardiovascular Surgery, Chiba Medical Center

Objective

Antiphospholipid syndrome (APS) increases risks of chronic thromboembolic pulmonary hypertension and thrombotic complications after cardiac surgery. We sought to determine surgical outcomes of those with APS who underwent pulmonary endarterectomy.

Methods

We reviewed 102 patients who underwent pulmonary endarterectomy between 1998 and 2014. There were 22 patients with APS: 14 patients had lupus anticoagulant (LAC), 7 had β 2-Glycoprotein I (GPI) antibody, and 7 had anti-cardiolipin (aCL) antibody. Three patients had all these antibodies.

Results

Patients with APS had significantly prolonged aPTT and PT, and elevated levels of thrombomodulin and fibrinogen. There were no differences in in-hospital mortality and thromboembolic complications, but hemorrhagic complications including pulmonary hemorrhage, reexploration for bleeding, and late tamponade more frequently occurred in patients with APS (41% vs 14%, $p < 0.01$). Patients with antibodies to aCL or GPI had significantly lower platelet counts compared with patients without APS, although patients with LAC had similar platelet counts to those without APS. In multivariate regression analysis, aCL or GPI antibodies were independent predictor of hemorrhagic complications. (OR, 4.5; 95% CI, 1.1-18; $p = 0.04$). There were no differences in mortality and adverse events at a mean follow-up of 52 months.

Conclusion

Patients with APS had a abnormal coagulation test and developed more frequently hemorrhagic complications after pulmonary endarterectomy. The presence of aCL or GPI antibodies were associated with hemorrhagic complications. However, APS had no

impacts on short- and long-term mortality.