

Abstract

Objective:

Antiphospholipid antibodies (aPL) are recognized to have a pivotal role in recurrent pregnancy loss (RPL) and cardiovascular disease. Therefore, we assessed the vascular function of women with RPL and examined the association with each type of aPL.

Method:

In this retrospective study, 569 women with RPL and 55 healthy women who had never experienced pregnancy loss were recruited. We performed blood tests for aPL and acceleration plethysmography (APG) to evaluate peripheral vascular function.

Results :

The Differential Pulse Wave Index (DPI), indicating vascular elasticity, was significantly lower in women with RPL (115.6 ± 4.1) compared to the control group (117.0 ± 2.3). DPI in RPL women with anti- β_2 glycoprotein I (a β_2 GP I) IgG was significantly lower than those without. Remained blood volume (RBV), indicating post-vasoconstriction blood content, was significantly higher in RPL women with a β_2 GP I IgG than in those without. Regression analysis showed a β_2 GP I IgG and body mass index (BMI) linked negatively with DPI.

Conclusions :

Women with RPL have subclinical vascular dysfunction even at reproductive age. It is possible that a β_2 GP I IgG is associated with vascular dysfunction in

RPL women.