

Antiphospholipid Syndrome: Risk Factor for Preeclampsia

Mahmood Abedinzade: Associate Professor, Medical Biotechnology Research Center, School of Paramedicine, Guilan University of Medical Sciences, Rasht, Iran. Mahmood.abedinzade@gmail.com

Zahra Bostani Khalesi*: Associate Professor, Department of Midwifery, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran. z_bostani@yahoo.com

Abstract

Antiphospholipid syndrome is the most frequently acquired risk factor for a treatable cause of recurrent abortion, stillbirth, preeclampsia, intrauterine death, premature birth, and fetal growth restriction. The purpose of this study was to review current literature about the antiphospholipid syndrome as a risk factor for preeclampsia. Systematic literature searches using pre-specified terms were performed on PubMed, Ovid EMBASE, Ovid Medline, Cochrane library, Clinicaltrials.gov, and Web of Science from database inception dates to Jun 2022. Antiphospholipid syndrome, in relation to pregnancy, is characterized by the presence of antiphospholipid autoantibodies in association with repeated fetal loss and complications such as preeclampsia retarded fetal growth, or placental insufficiency.

Keywords: Antiphospholipid syndrome, Preeclampsia, Antiphospholipid antibodies

Introduction:

Preeclampsia is the most common form of high blood pressure that complicates the pregnancy (1). It is generally defined as the occurrence of new-onset hypertension and new-onset proteinuria or other multi-systemic signs after twenty weeks of gestation (2). In the absence of proteinuria, preeclampsia can be classified by the presence of hypertension with end-organ complications characterized by one or more of the following: thrombocytopenia, impaired liver function, renal insufficiency, pulmonary edema, or cerebral or visual disturbances (3).

Antiphospholipid syndrome is considered a risk factor for preeclampsia (4). Antiphospholipid syndrome is an autoimmune disorder characterized by antiphospholipid antibodies and thrombosis and/or obstetric morbidity (5). Both laboratory and clinical criteria are required for a diagnosis of Antiphospholipid syndrome (6). Antiphospholipid syndrome included eclampsia, pre-eclampsia, or placental insufficiency leading to premature birth prior to 34 weeks as a clinical criterion for antiphospholipid syndrome (7). However, the relationship