Pregnancy is a condition of increased affinity to blood clotting. The most important changes of coagulation system in pregnancy involve the increase of the following coagulation factors: fibrinogen production, level of numerous blood coagulation factors- FII, FVII, FVIII, FX, FXII, acquired activated protein C resistance, and the decrease of: fibrinolysis due to the increase of a large number of fibrinolytic activator inhibitors PAI-1 and PAI-2, thrombin activatable fibrinolysis inhibitor TAFI, and levels of proteins S and C. This disease is not a disease on its own, but a group of inherited and acquired coagulation disorders that increase the predisposition to thrombosis. The treatment of choice in pregnancy are low-molecular-weight heparins (LMWHs) which are derived from standard heparin by controlled hydrolysis, thus obtaining heparins of a lower molecular mass. The most commonly used LMWHs are: dalteparin sodium, enoxaparin, nadroparin-calcium, reviparin. LMWH is given in prophylactic doses - low and medium doses in therapeutic doses. Thromboprophylaxis in pregnancy is implemented as: intrapartal, intra- and postpartum according to the official recommendations of the American Association of Obstetricians and Gynecologists (ACOG). Specific recommendations of ACOG refer to the treatment of hereditary thrombophilia in pregnancy. Acta Medica Medianae 2015;54(3):54-58.

**Key words:** pregnancy, thrombophilia, thromboprophylaxis, low molecular weight heparins