E7. MANAGEMENT OF HEREDITARY THROMBOPHILIA IN PREGNANCY.

Daniel Coriu
University of Medicine and Pharmacy "Carol Davila", Bucharest,
Center of Hematology and Bone Marrow Transplantation Fundeni, Bucharest

So far, in the scientific literature were reported a significant number of mutations and polymorphisms potentially thrombophilic. There are also published data showing the involvement of these mutations / polymorphisms in the development of thrombotic accidents of pregnancy and pregnancy-related complications: recurrent pregnancy loss, severe eclampsia without apparent cause, "abruptio placentae", intrauterine growth restriction, intrauterine death.

According to international guidelines (ACOG, CHEST, BJH guidline) screening for heritable thrombophilia in pregnancy is indicated for patients with a personal history of VTE (especially unprovoked thrombotic events or in the presence of a minor risk factor); patients with a family history of VTE or hereditary thrombophilia (especially relative to grade 1). It is not recommended to perform screening in unselected population. Depending on the type of hereditary thrombophilia there are two risk groups: 1. low risk of hereditary thrombophilia: factor V Leiden - heterozygous form, prothrombin gene mutation 20120 - form heterozygous deficiency of protein C or protein S deficiency hereditary thrombophilia; 2. high risk of hereditary thrombophilia: antithrombin deficiency, factor V Leiden - homozygous, prothrombin gene mutation 20120 - homozygous double heterozygous for factor V Leiden and prothrombin gene mutation 20120. Molecular testing is not recommended for other polymorphisms with thrombophilic risk. When we indicate the molecular testing for hereditary thrombophilia we must be sure that this result will influence the management of patients. Also, we need to ensure that these tests are performed in experienced laboratories accredited for these tests and the results are interpreted by experienced clinicians.

Each patient must be individually analyzed and therapeutic decision will be taken depending on the type of hereditary thrombophilia and the presence of additional risk factors, including family history of thrombosis installed before 50 years. Thrombophilia prophylaxis in Pregnancy Study (TIPPS) is the only randomized trial aimed to determine whether prophylactic administration of dalteparin reduces the risk of venous thromboembolism (VTE) and the risk of complications related to pregnancy in pregnant women at high risk of developing these complications. The results were recently published (Lacet, July 2014) and indicates the absence of a benefit to pregnant women receiving prophylactic anticoagulation. There are situations in which prophylaxis is mandatory - ie. women with previous VTE.

Administration of prophylactic antithrombotic therapy in pregnant women has to be a decision assumed by the obstetrician in collaboration with haematologist. This therapy should not be recommended solely on the basis of hereditary thrombophilia testing and, apart from the cost of treatment (about 8000 U.S. $ / pregnancy), we must consider the psychological impact of diagnosis, and management of anticoagulant (approx 400 shots / pregnancy).

This work was supported by the grant PN 42-099 from the Romanian Ministry of Research and Technology.