

Abstract

Leiden mutation and mutation of the gen for prothrombin are classified as hereditary thrombophilia affecting external cascade's hemocoagulation factors. The higher incidence is in the Europoid. We marked those disorders not only as risk factors for thromboembolism but as risk factors for obstetrics complications as well.

This bachelor thesis completes theoretical knowledge of Leiden mutation and mutation of the gen for prothrombin. Afterward, the thesis is focused on obstetrics complications that are associated with those thrombophilias.

The analytical part of the thesis is devoted to the association of the mentioned mutations and the higher risk of recurrent pregnancy loss. Meaning that women who carry the such mutation are more likely to have the anamnesis of 2 or more miscarriages compared to women without thrombophilia.

First, the hypothesis was set that the women with thrombophilia are going to have more frequent recurrent pregnancy loss compared to the control group without thrombophilia.

To verify the hypothesis a retrospective check of the databases was made. The databases were from The Institute of Medical Biochemistry and Laboratory Diagnostics of the General University Hospital and of the First Faculty of Medicine of Charles University, where the group with thrombophilia was taken. The control group was made up of the women who gave birth in the March of 2023 in the Department of Obstetrics and Gynaecology of the First Faculty of Medicine of Charles University and the General University Hospital. Women in the control group were either not diagnosed with inherited thrombophilia or did not mention this fact.

The result from the analyses was that the women with inherited thrombophilia had recurrent pregnancy loss more frequently in their anamnesis compared to the control group. In the control group, neither of those women went through more than one miscarriage. Both groups were composed of fifty women, one hundred altogether. This result cannot be taken as a significant one, there is no certainty that the miscarriages of the analyzed group were caused only by thrombophilia. Also, it cannot be proven that the women in the control do not carry thrombophilia because there is no regular screening for those thrombophilias.

Keywords: Leiden mutation, mutation of prothrombin, miscarriage, obstetric complications, gestation, thrombophilia