

Medical Expertise

"Development of the European Network in Orphan Cardiovascular Diseases"
„Rozszerzenie Europejskiej Sieci Współpracy ds Sierocych Chorób Kardiologicznych”

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CASE SUMMARY

This is history of 27 old woman (smoker) in whom two years ago a deep vein thrombosis of the lower limbs was revealed during hormonal contraception. After the incident she stopped smoking cigarettes. In a clinical study she does not represent the limit of physical capacity. In ECG-incomplete right bundle branch block was noted. Specialized tests revealed the presence of V Leiden factor, heterozygous variant (1691). Transthoracic echocardiogram showed septal aneurysm with hemodynamically insignificant ASD II. Qp: Qs about 1.5:1.

DISCUSSION

Thrombophilia is a congenital or acquired abnormality caused most often by factor V Leiden or prothrombin gene polymorphism. This leads to thrombus formation, which can result in partial or total veins occlusion. This leads to impaired blood supply to the organ and the thrombus can form an embolic material. Shetty et al (1) pointed out that thrombophilia may be particularly dangerous for pregnant women and can lead to miscarriage or even fetal death. On the other hand Smírová et al (2) pay attention to the long known fact, that the use of hormonal contraception carries the risk of embolism. They also indicates that the risk of thromboembolic disease is 4x higher in women taking oral contraceptives. The authors do not believe that it is necessary to perform screening tests but when the family history is positive it is an indication to maintain extreme caution and choose other methods of contraception. Women should be informed of the increased risk of deep vein thrombosis and how to prevent

it. Gluck et al (3) described the results of treatment with testosterone in 38 men and 4 women. They showed that the development of thrombosis and cardiovascular incidents were formed at a similar time, ie about 3-4.5 month from the beginning therapy. They suggest that it is possible similar common pathophysiology of these changes.

The risk of blood clots can also be associated with the treatment of patients using the devices placed in the heart. Closing interatrial defects is an accepted method of treatment. The thromboembolic complications are rare. However, the unexpected embolization complication can happen. Khatchatourov and colleagues (4) describe a case of massive embolization after closure of ASD 2 using the Atrial Septal Defect Occlusion System (Dr. Ing Osypka Corporation, Germany). The authors indicate that percutaneous ASD closure device of this type can expose the patient to serious embolic complications.

The report from the last few months by Hornsby et al (5) indicates that screening for thrombophilia is becoming more and more common, and the test should detect patients with antiphospholipid syndrome. It is believed, however that the use of routine prophylaxis in asymptomatic patients with thrombophilia as yet is not recommended.

EXPERT'S OPINION

These data indicate that the patient does not need to close a small ASD 2, because the risk of thromboembolic complications may be prohibitively high compared to the small loss of the benefits of the closure. Qp: Qs is not important from the point of view of hemodynamic disturbances.

CONCLUSION

In my opinion the patient does not require a risky procedure. It is advisable to focus on the basic disease (thrombophilia) and periodic inspection of the cardiovascular system.

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