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## **THE SOFTWARE SCORING OF THE PULMONARY ARTERY**

### **THROMBOEMBOLISM RISK IN ONCOLOGY**

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**Abstract** The problem of the thromboembolism of the pulmonary artery (TEPA) is still not solved and quite urgent especially for patients with malignant tumors. The risk of TEPA at this patients' rank is about 10-40% and 10% with lethal outcome without adequate prophylaxis. The TEPA prophylaxis is based on the stratification of the risk level that is subsequently depends on quality and quantity of the risk factors for every case personally.

**Key words:** thromboembolism of the pulmonary artery, risk, oncology, colorectal cancer, software

**Objective** To optimize the program of the thromboembolic complications for the patients with oncological disease of colorectal localization.

**Materials and methods** To gain the purpose we created and registered the software for TEPA risk calculation (The certificate of Russian state software registration for IBM N2015619184, 26.08.2015). This software gives us ability to calculate the risk factors of the TEPA for every patient personally and after all to get standard scheme of the TEPA prophylaxis and treatment personally with considering of patient's weight and age.

**Results and discussion** The retrospective analysis of the colorectal cancer cases (n=41) were made. We found these TEPA risk factors: the age of 61-80 years in 67%, obesity – 45%, heart diseases – 33%, the surgical intervention duration more than 1 hour – 75%, varicose disease of the legs – 45%. The combination of the 2 risk factors was found in 20% and 3 risk factors in more than 62,5%. Thus, the high risk of TEPA (IIC, IIIA, B, C by Samama, 1999) was no less than in 17,5% cases with the risk of TEPA in 5 – 10%, and lethal TEPA in 1 – 5%. The patients with high risk of TEPA must pass through active methods of TEPA prophylaxis such as pharmacotherapy.

Thus, our software gives ability to doctors of every specialty to calculate the risk of the thromboembolic complications with mathematical accuracy and objectively get personified program of TEPA prophylaxis and treatment by actual national recommendations with considering the patients' weight and age. This is especially actual for the medical institutions without cardiovascular surgeons in stuff who are responsible for TEPA stratification in routine conditions.

#### References

1. Anikin S.V. Thromboembolic complications in colorectal cancer patients. Bulletin of Russian State Medical University. – 2006. – 2. – 102 p.
2. Russian clinical recommendations by diagnostics, treatment and prophylaxis of the venous thromboembolic complications/Phlebology, 1, 2010, Vol. 4, 2 ed
3. Bahl V.A. Validation study of a retrospective venous thromboembolism risk scoring method / Bahl V., Hu H.M., Henke P.K., et al. // Ann Surg. – 2010 Feb. – № 251(2). – P. 344–50

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## **RESULTS OF IMMUNOFERMAL ANALYSIS IN CHILDREN RELATING TO THE GROUP OF FREQUENT PATIENTS**

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**Key words:** often ill children, TORCH infections, enzyme immunoassay.

**Summary:** Children who are prone to frequent acute respiratory infections (ARI) are often called sick. Frequent ARI can lead to disruption of the physical and neuropsychological development of children. One of the reasons is the presence of a TORCH infection in a child. For the diagnosis of TORCH infections, the enzyme immunoassay is used to determine the levels of the Ig classes of IgM and IgG that appear at different stages of the immune response and are in the blood at different times. The article reflects the results of analysis of 50 case histories of children