Safe use of antithrombotics

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Cardiovascular diseases are one of the leading causes of morbidity and mortality in modern society. Thrombotic and thromboembolic diseases are common and may have serious consequences, such as myocardial infarction, cerebrovascular insult, deep vein thrombosis, and pulmonary embolism. For the treatment and prevention of thrombosis and thromboembolic events, we use antithrombotic drugs¹.

The most common thrombotic event in the venous system is venous thrombosis, which most commonly occurs in the deep veins of the legs. If not recognized and treated on time, deep vein thrombosis may have serious consequences and, in some cases, even lead to death. The most important and life-threatening complication of deep vein thrombosis is pulmonary embolism. Namely, when a blood clot develops in a deep vein, a part of the thrombus can break off, which then travels through the circulatory system through the heart to the lungs. If this "traveling" thrombus, which we call an embolus, is large enough, it can block one of the large blood vessels in the lungs and thus cut off the blood supply to the lungs, which can end fatally. A thromboembolic event can also occur in the arterial system. The most common cardiac arrhythmia, atrial fibrillation, increases the risk of a blood clot that can then travel to the blood vessels of the brain and cause a stroke. Stroke is the most frequent and dramatic consequence of atrial fibrillation, and the risk of its occurrence in these patients is increased fivefold. Antithrombotic therapy includes anticoagulant and antiplatelet therapy with drugs used in the prophylaxis and treatment of various clinical conditions. The main role of an antithrombotic is to prevent the formation of a clot and the expansion of an already existing thrombus.

Antithrombotic drugs are among the most used drugs in medical practice, with the highest frequency of prescription for cardiac and neurological patients. The side effects caused by antithrombotic drugs are more serious compared to the side effects of other drugs and often require hospitalization. Therefore, increased caution is needed when using them, and education of health workers and patients is important².

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- Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJ. Global and regional burden of disease and risk factors, 2001: systematic analysis of population health data. Lancet. 2006 May 27;367(9524):1747-57. https://doi.org/10.1016/S0140-6736(06)68770-9
- 2. Coen Herak D, Miloš M. Hemostasis and laboratory diagnostics of hemostasis disorders. In: Sertić J. Clinical chemistry and molecular diagnostics in clinical practice. Medical Publishing House, 2015; pp. 533-546