

# ENDOVASCULAR TREATMENT OF ISCHEMIC STROKE AT THE GRODNO UNIVERSITY HOSPITAL

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**Introduction.** In patients with cerebral infarction (ischemic stroke) due to large vessel occlusion, randomized controlled trials have reported the safety and efficacy of mechanical thrombectomy (MT) [1, 3].

**Aim of the study.** We aimed to provide the initial analysis of outcomes in stroke patients treated with MT in the clinical routine.

**Materials and methods.** The subjects of the study were 30 patients undergoing treatment in 2021-2022 at the Grodno University Hospital with a diagnosis of "Cerebral Infarction", code I63 according to ICD-10, the treatment complex for which included mechanical thrombectomy. The primary endpoint was the modified Rankin Scale (mRS) 3 months after stroke onset. The list of parameters for analysis included the gender and age of the patient, the level of mRS before the onset of the disease, the localization of thrombotic occlusion, the degree of neurological deficit according to the National Institutes of Health Stroke Scale (NIHSS), the degree of revascularization (restoration of perfusion) according to the modified scale for restoration of perfusion after thrombolytic therapy (Thrombolysis In Cerebral Infarction, mTICI) [3], the presence of hemorrhagic transformation of cerebral infarction according to the criteria of the ECASS study [2].

**Results and discussion.** The median age of patients was 64 years (interquartile range (IQR) 59-69) and the median NIHSS score at admission was 16 (IQR 12-19). 17 patients (57%) had occlusion of the M1 segment of the middle cerebral artery, 6 patients (20%) had occlusion of the M2 segment, and 7 patients (23%) had occlusion of the internal carotid artery. In 14 patients (47%), thrombolysis was performed before thrombectomy. After MTE, 20 patients (67%) had level 2b/3 on the mTICI scale. The median NIH score at 24 hours decreased to 14 (IQR 10-18). Within 7 days from the onset of stroke, the median NIH score decreased to 12.5 (IQR 6-18). 27% of patients (8/30) 3 months after the onset of stroke were functionally independent in daily life (mRS 0-2), 43% (13/30) had signs of disability (mRS 3-5). The 90-day mortality rate was 30% (9/30).

**Conclusion.** Functional outcome was less favorable and higher mortality rates were observed than reported by authors of large randomized trials, likely due to less stringent inclusion criteria.

## ЛИТЕРАТУРА

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## MACROHEMATURIA IN THE COURSE OF RIVAROXABAN THERAPY: A CASE OF BLADDER TUMOUR

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**Introduction.** Rivaroxaban is an oral anti-coagulant that has been approved by the FDA for secondary prevention after acute coronary syndrome [1]. It's a non-vitamin K antagonist that selectively inhibits factor Xa. As it does not require routine check-ups to adjust dosage according to coagulogram monitoring and checking of International Normalised Ratio (INR), it can be more convenient to the patient. Anti-Xa agents rivaroxaban doesn't require laboratory testing for dose adjustment [2, 4].

One of the most common side effects of using this drug is macroscopic hematuria. But there are several other conditions that can present with macroscopic hematuria such as urological malignancies including Bladder Cancer. Recurrent macroscopic hematuria presents with a multitude of differentials. One of the most common causes is urinary tract infection and urinary tract stones but it typically presents with pain. This also may be the only sign of an underlying urological malignancy. It isn't rare for patients on anticoagulant therapy to have visible hematuria. Macroscopic hematuria may be present in benign causes such as benign prostatic hyperplasia, urinary tract calculi and urinary tract infections.

Bladder cancer is the tenth most common cancer worldwide and the most common cancer of the urinary tract. The most predominant presenting symptom in 80% of patients is hematuria which is usually gross, painless and intermittent in nature. Some of the independent risk factors for the presence of bladder cancer