

## **INTERVENTIONAL CARDIOLOGY**

Working Ability of Patients with a History of Q-Wave Acute Myocardial Infarction (AMI) Who Underwent Endovascular Myocardial Reperfusion in the Acute Period (Five-Year Follow-Up)

*Volynsky Yu.D., Chernysheva I.E., Yarnykh E.V., Polumiskov V.Yu., Buraeva O.S., Koledinsky A.G., Iosseliani D.G.*

Successful Endovascular Treatment of Multiple Coronary Occlusions in Acute Myocardial Infarction Complicated by Cardiogenic Shock and Clinical Death (case report)

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Case of Ventricular Septal Defect Closure by an Occluder in a Female Patient with Mechanical Aortic Valve Prosthesis

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## **ANGIOLOGY AND VASCULAR SURGERY**

Hybrid Surgical intervention in a Patient with Thrombosed Abdominal Aortic Aneurysm

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Hybrid Surgical Intervention in a Patient with Multistage Atherosclerotic Lesions of Peripheral Vessels: Carotid Endarterectomy with Single-Stage Retrograde Transcarotid Stenting of Brachiocephalic Trunk, Femoral-Femoral Bypass and Stenting of Left External Iliac artery. Clinical Case

*Akchurin R.S., Imaev T.E., Pokidkin I.A., Osmanov M.R., Lepilin P.M., Kolegaev A.S., Medvedeva I.S., Komlev A.E.*

## **MISCELLANEOUS**

Experience with the Use of Angiox (Bivalirudin) in Acute Coronary Syndrome (ACS) Patients with Complications Caused by Percutaneous Coronary Intervention (PCI)

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Regarding the Results of the 1st Annual International Course “Modern Trends in the Treatment of STEMI – from Guidelines to Everyday Practice”

## **JUBILEE**

80th birthday of Alexander Konovalov

## **Working Ability of Patients with a History of Q-Wave Acute Myocardial Infarction (AMI) Who Underwent Endovascular Myocardial Reperfusion in the Acute Period (Five-Year Follow-Up)**

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The recovery of working capacity of patients after acute myocardial infarction is the most important medical as well as social and economic task. The presented data are suggestive of the leading role played by endovascular myocardial reperfusion performed within the shortest term after the onset of the disease, in the solution of this task.

**Key words:** acute myocardial infarction, endovascular reperfusion, working capacity.

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# Successful Endovascular Treatment of Multiple Coronary Occlusions in Acute Myocardial Infarction Complicated by Cardiogenic Shock and Clinical Death (case report)

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Cardiogenic shock remains one of the dangerous complications of acute myocardial infarction with in-hospital mortality rate of up to 80%. It is also known that the course of this disease considerably depends on the state of coronary circulation, and in case of its multiple stenotic-occlusive lesions mortality can reach 100%. A case of successful treatment of a female patient with Q-wave anterior acute myocardial infarction complicated by cardiogenic shock and clinical death is described in this article. The female patient underwent complete endovascular myocardial revascularization which included recanalization and stenting of the left anterior descending artery (LAD), right coronary artery (RCA) and obtuse marginal branch (OMB) of the left circumflex artery (LCX). Besides, cytoprotective agent Mexicor was administered as bolus into the LAD immediately after its recanalization to prevent myocardial reperfusion injury. Urgent procedure was performed during continuous resuscitation procedures which included closed-chest cardiac massage, intra-aortic balloon pumping (IABP) and mechanical lung ventilation (MLV).

**Key words:** acute myocardial infarction, cardiogenic shock, multivessel disease, complete revascularization.

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## **Case of Ventricular Septal Defect Closure by an Occluder in a Female Patient with Mechanical Aortic Valve Prosthesis**

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The authors present a case of ventricular septal defect closure by an occluder performed through the mechanical aortic valve prosthesis.

**Key words:** congenital heart diseases, ventricular septal defect, occluder, mechanical aortic valve prosthesis.

# Hybrid Surgical intervention in a Patient with Thrombosed Abdominal Aortic Aneurysm

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Encouraging short- and mid-term results have made the endovascular abdominal aortic repair (EVAR) in combination with implantation technique of the chimney stents a method of choice in treatment of complex abdominal aneurysms in our clinic. Our personal observation is one of a few cases described in literature, involving the use of the chimney technique with unilateral endovascular repair of thrombosed abdominal aortic aneurysm (AAA) and simultaneous femorofemoral bypass.

**Key words:** thrombosed abdominal aortic aneurysm, endovascular abdominal aortic repair, AAA, EVAR, chimney stents, chimney technique, stenting of the renal arteries, hybrid surgery.

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# Hybrid Surgical Intervention in a Patient with Multistage Atherosclerotic Lesions of Peripheral Vessels: Carotid Endarterectomy with Single-Stage Retrograde Transcarotid Stenting of Brachiocephalic Trunk, Femoral-Femoral Bypass and Stenting of Left External Iliac artery. Clinical Case

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We present a clinical case of simultaneous endovascular approach and traditional surgical revascularization in an elderly patient with multifocal atherosclerotic lesions have made the intervention less traumatic without its separation into several stages and helped to radically correct blood supply in various arterial territories.

**Key words:** Hybrid surgical intervention, multistage atherosclerotic lesions of peripheral vessels, carotid endarterectomy with single-stage retrograde transcarotid stenting of brachiocephalic trunk, femoral-femoral bypass, stenting of left external iliac artery.

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# Experience with the Use of Angiox (Bivalirudin) in Acute Coronary Syndrome (ACS) Patients with Complications Caused by Percutaneous Coronary Intervention (PCI)

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We present a review of our experience with the use of bivalirudin in 35 patients with acute coronary syndrome (ACS).

The study was aimed at the assessment of possible efficacy and safety of using Angiox during high risk interventions or percutaneous coronary interventions (PCIs) with already developed complications.

The administration of the drug after the development of no-reflow or slow-reflow syndrome in 18 patients resulted in improved antegrade blood flow in all cases. The drug was preventively administered in 17 patients at high risk of no-reflow or slow-reflow syndrome development; this may have allowed them to avoid complications, such as distal microembolism, and to achieve antegrade blood flow in a symptom-related coronary artery (TIMI-3). No significant bleeding was registered during the intake of bivalirudin.

A clinical case of treating a patient with acute coronary syndrome caused by acute thrombosis of the coronary artery is presented in the article.

**Key words:** acute coronary syndrome, acute myocardial infarction, percutaneous coronary intervention, Angiox, bivalirudin, no-reflow, slow-reflow, thrombosis.

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## **Device for Remote Coronary Angioaortography**

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The suggested device for remote coronary angiography allows to increase the amount of endovascular interventions without increasing medical staff and to minimize the surgical team's exposure. This, in turn, helps to use expensive medical equipment in a more effective way.

**Key words:** coronary angioaortography, remote technique.

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