INTERVENTIONAL CARDIOLOGY
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Balloon Valvuloplasty of Stenosed Tricuspid Valve Bioprosthesis (A clinical case)
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Results of Endovascular Interventions in Patients with Hibernating Myocardium
V.Ya. Rudman, A.V. Patrikeev, D.A. Maksimkin, V.Yu. Baranovich, A.G. Faybushevich, A.V. Mambetov, Z.Kh. Shugushev

ENDOVASCULAR DIAGNOSIS
Optical Coherence Tomography for Evaluation of Coronary Stents
D.A. Asadov, O.E. Sukhorukov, D.S. Kurtasov, I.A. Kovalchuk, A.N. Rogatova

CARDIAC SURGERY
Strategy of Coronary Artery Bypass Grafting for Arteries with Moderate (<75%) Stenosis being a Part of Multivessel Disease during Direct Myocardial Revascularization
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Papillary Fibroelastoma. (Successful Removal of the Rare Type of Papillary Fibroelastoma from the Pulmonary Valve)
T.R. Rafaeli, I.V. Isaeva, R.Yu. Popov, A.N. Rogatova, A.V. Stepanov, L.S. Barats, A.A. Kiryaev, A.N. Pankov, A.L. Rodionov, A.Z. Chachev

MISCELLANEOUS
On Summated Assessment of the State of the Coronary Bed in Ischaemic Heart Disease Cases
Yu.S. Petrosyan, D.G. Iosseliani

First Experience of Retrograde Myocardial Perfusion for Endovascular Correction of Complex Lesions of the Anterior Coronary System in Patients with Acute Coronary Syndrome

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Support of coronary blood flow during endovascular correction of complex coronary lesions is the principal objective. The patients aged from 45 to 68 y.o. were included in our study. To support the blood supply of left ventricle during correction of complex lesions of the anterior coronary system, retrograde perfusion of the anterior left ventricle wall was performed. Significant favorable impact of myocardial retroperfusion on the primary parameters of central hemodynamics including heart rate and systolic blood pressure was observed in all examined patients. The patients supported with retroperfusion demonstrated significant decrease in ST-elevation compared to non-retroperfusion electrocardiography data in thoracic leads.
Key words: retroperfusion, adjuvant blood supply, complex coronary lesions, endovascular surgery, acute coronary syndrome.

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Balloon Valvuloplasty of Stenosed Tricuspid Valve Bioprosthesis (A clinical case)

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We present a case of transluminal balloon valvuloplasty (TBVP) of tricuspid valve bioprosthesis with technical details of the procedure and data of examination at day 2, in 1 month and 6 months after the procedure. EchoCG revealed stenosis of tricuspid valve bioprosthesis with relevant clinical signs. After endovascular intervention cardiac indices and patient's condition improved. Positive dynamics persisted for 6 months. The signs of restenosis of tricuspid valve bioprosthesis appeared during the last month and have been confirmed by physical examination and EchoCG data.
Hence, transluminal balloon valvuloplasty of tricuspid valve bioprosthesis allows to achieve immediate positive results. In the presented case the results persisted for a rather short period (6 months).
Key words: valvuloplasty, balloon valvuloplasty, tricuspid valve bioprosthesis, stenosis of tricuspid valve bioprosthesis, restenosis, restenosis of bioprosthesis, restenosis of tricuspid valve bioprosthesis.

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Results of Endovascular Interventions in Patients with Hibernating Myocardium

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Role and appropriateness of evaluation of myocardial vitality using dobutamine stress echocardiography in patients with post-infarction cardiosclerosis during planning of endovascular interventions are determined. It is shown that restoration of coronary blood flow in the areas of viable myocardium promotes fast and better restoration of kinetics of hibernating myocardium, that generally increases efficacy of percutaneous coronary interventions in this population and decreases rate of unjustified endovascular interventions. The correlation between durations of hibernation and restoration of the left ventricle local kinetics is determined.
Key words: hibernating myocardium, myocardial vitality, percutaneous coronary interventions, post-infarction cardiosclerosis.

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Optical Coherence Tomography for Evaluation of Coronary Stents

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To date, angiographic visualization of the vessel's contours is the "gold standard" in the evaluation of vascular wall condition, in native, as well as in stented segments. However the evaluation of endothelialization degree in the lumen of a stented segment often is not complete due to two-dimensional radiological presentation. The existing methods of intravascular visualization, especially optical coherent tomography, permit to assess the stented segment with maximal accuracy and reliability. This study was aimed at the evaluation of the possibilities of optical coherent tomography in the examination of coronary stents' condition in the mid-term after implantation.
Key words: intravascular visualization, optical coherent tomography, coronary stenting.

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Strategy of Coronary Artery Bypass Grafting for Arteries with Moderate (<75%) Stenosis being a Part of Multivessel Disease during Direct Myocardial Revascularization

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So far, there is no clear strategy for revascularization of CAs with non-critical (<75%) lesions being a part of multivessel disease during direct myocardial revascularization. There are no clinically and angiographically proven results indicating which minimal CA stenosis is reasonable for using ITA to ensure longevity typical for this conduit. The study is based on retrospective (on average, 6.4 ± 1.8 mo) analysis of preoperative and long-term CAG postoperative data obtained from 567 patients. The patients are divided depending on stenosis degree and conduit type. The superiority of venous conduits over ITA for revascularization of CAs with single stenosis J 70% is proven. The revascularization strategy for critical proximal stenosis in one vessel combined with no significant stenosis between this vessel and another vessel from the same arterial territory is determined.
Key words: myocardial revascularization, mammary artery, venous graft, non-critical stenosis, long-term coronaroangiography, competitive blood flow, graft reduction, myocardial revascularization strategy.

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Papillary Fibroelastoma. (Successful Removal of the Rare Type of Papillary Fibroelastoma from the Pulmonary Valve)

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The benign cardiac tumors are rare. Diagnostics is primarily based on incidental EchoCG exams of patients. The article contains data on diagnostics, clinical course, and possible complications of papillary fibroelastoma and presents a case of successful removal of the rarest type of papillary fibroelastoma located in the pulmonary valve.
Key words: cardiac tumor, papillary fibroelastoma, clinical course, diagnostics, complications, and surgical treatment of papillary fibroelastoma of the heart.

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On Summated Assessment of the State of the Coronary Bed in Ischaemic Heart Disease Cases

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