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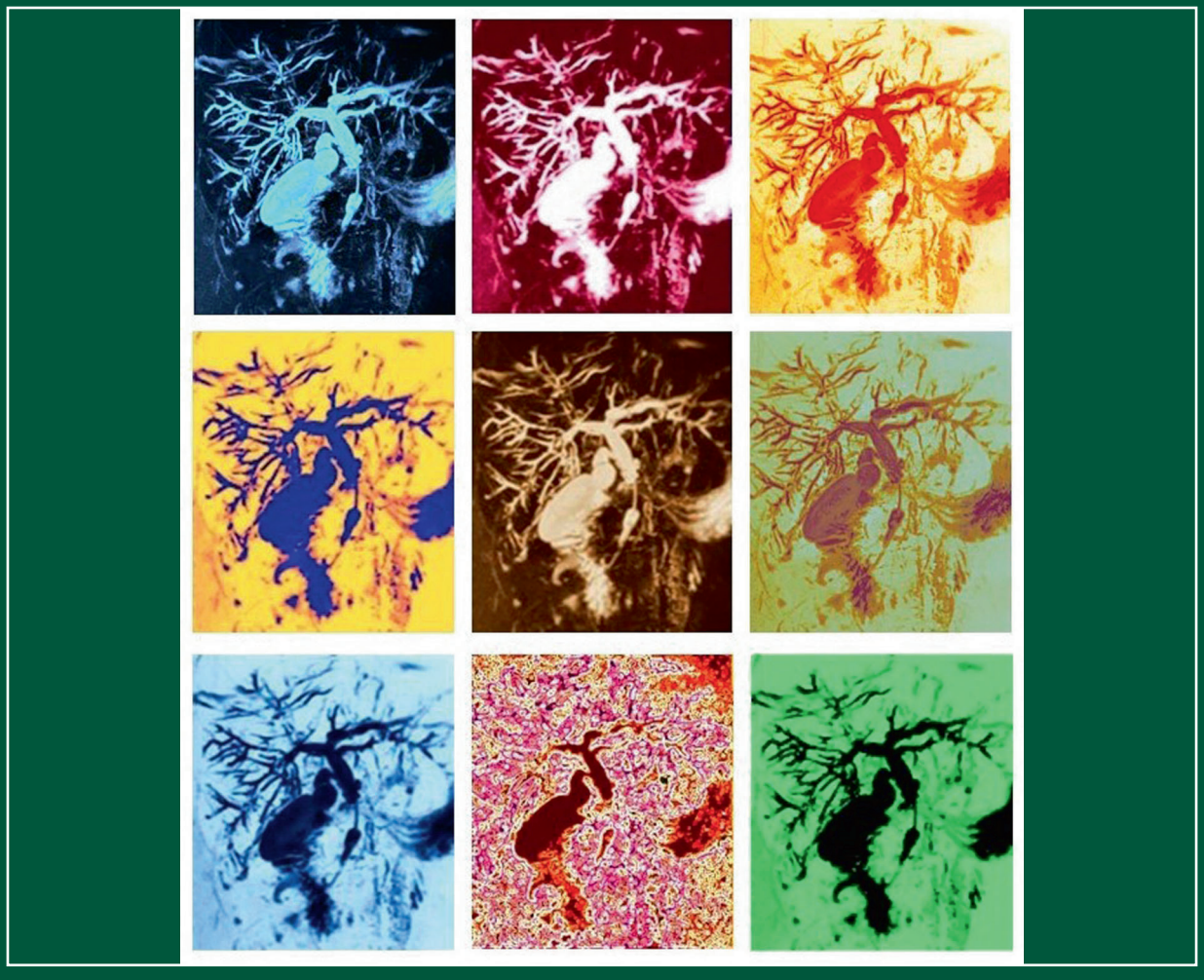
European Journal of Clinical Investigation

56TH ANNUAL SCIENTIFIC MEETING –
8–10 June 2022, Bari, Italy



Cholangiocarcinoma - 9 faces of the killer
It shows cholangiocarcinoma, an aggressive bile duct tumour with dismal prognosis,
It was captured during magnetic resonance cholangiopancreatography (MRCP)
Piotr Milkiewicz, Warsaw Poland

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ESCI EUROPEAN SOCIETY FOR CLINICAL INVESTIGATION

Official journal of the European Society for Clinical Investigation

European Journal of Clinical Investigation

THE JOURNAL OF THE EUROPEAN SOCIETY FOR CLINICAL INVESTIGATION

Aims & Scope

The European Journal of Clinical Investigation (EJCI), in publication since 1970, is a peer-reviewed general-interest biomedical journal with a broad readership. It is the official journal of the European Society for Clinical Investigation (ESCI) and it is published monthly by Wiley. It considers any original contribution from the most sophisticated basic molecular sciences to applied clinical and translational research and evidence-based medicine across a broad range of subspecialties. The EJCI publishes reports of high-quality research that pertain to the genetic, molecular, cellular, or physiological basis of human biology and disease, as well as research that addresses prevalence, diagnosis, course, treatment, and prevention of disease. We are primarily interested in studies directly pertinent to humans, but submission of robust in vitro and animal work is also encouraged. Interdisciplinary work and research using innovative methods and combinations of laboratory, clinical, and epidemiological methodologies and techniques is of great interest to the journal. Several categories of manuscripts (for detailed description see below) are considered: editorials, original articles (also including randomized clinical trials, systematic reviews and meta-analyses), reviews (narrative reviews), opinion articles (including debates, perspectives and commentaries); and letters to the Editor.

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THE JOURNAL OF THE EUROPEAN SOCIETY FOR CLINICAL INVESTIGATION

European Society for Clinical Investigation

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Officers and members of the ESCI Council 2020

Objectives

The objectives of the Society are the advancement of medical practice through science; the cultivation of clinical research by the methods of the natural sciences; the correlation of science with the art of medical practice; the fostering of high standards of ethical practice and investigation; and the diffusion of a spirit of fraternity and international co-operation among and through its members.

Membership

Any person who has been actively involved in medical research in Europe, for example by involvement in original investigations in clinical or allied sciences of medicine, can apply for membership of ESCI. Members will receive the *EJCI* monthly. Any company, corporation, organisation, or trust can apply for corporate membership in the Society.

Meetings

The Society holds one Annual Scientific Meeting each year, usually in April/May. Meetings are held in different cities in Europe. Other Society's activities include the sponsorship of Workshops and Postgraduate Courses and the encouragement of the exchange of Scientists between Laboratories.

Contact information ESCI

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protein, blood cell count, neutrophils and as well as their related activation biomarkers: myeloperoxidase, matrix metalloproteinase (MMP)-8 and MMP-9. Over time median level of both OPN and resistin peak at cycle two and then dropped down until the last cycle. Survival analysis revealed a significant predictive ability toward OS for early OPN assay (HR at baseline 3.125 with a 95% CI of 1.41 to 6.94) and resistin (HR at second cycle 2.85 with a 95% CI of 1.22 to 6.67).

Conclusions: Our data indicate for the early assessment of both OPN and resistin a potential role in the outcome of NSCLC treated with nivolumab. Although unpowered and lacking a clear pathophysiological explanation, these preliminary findings call the attention toward the innate immune activation in NSCLC, potentially linked with metabolic profile.

56ASM-0011 | Influence of clonidine hydrochloride on the effect of If blockade on isolated rat heart

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Background: Sympathetic control of heart rate plays an important role in the pathophysiology of arrhythmias, hypertension, coronary heart disease, and chronic heart failure. Alpha$_2$-adrenergic receptors (α_2-AR) and hyperpolarization-activated currents (If) are involved in the regulation of heart function. The aim of this study was to investigate the effect of clonidine hydrochloride after of preliminary blockade of If-currents on isolated by Langendorff rat heart.

Materials and Methods: Experiments were carried out ex vivo on isolated hearts of 3-week-old rats (n=14). This age is characterized by significant properties of the heart function associated with the formation of adrenergic innervation. During the experiment, an electrogram of the heart was recorded using atraumatic electrodes. Changes in heart rate (HR) and coronary flow (CF) were recorded after application of the If blocker ZD7288 (10^{-9}mol/L and 10^{-5}mol/L) and the α_2-AR agonist clonidine hydrochloride (10^{-6}mol/L).The data were statistically processed using Student's t-test.

Results: Stimulation of α_2-AR by clonidine hydrochloride after If blockade by ZD7288 (10^{-9}mol/L) in isolated heart of 3-week-old rats increased the HR decline by 20% ($p < 0.01$) and increased CF by 15% ($p < 0.01$). ZD7288 in concentration 10^{-5} mol/L decrease the effect of bradycardia after the application of clonidine hydrochloride by 12% ($p < 0.01$).

Conclusions: Thus, in experiments to studying the role of α_2-AR and If in regulation 3-week-old rats isolated heart was shown that preliminary If blockade enhanced the bradycardic effect and increased blood supply in the isolated heart. The study was supported by Russian Science Foundation (grant No. 21-15-00121, https://rscf.ru/project/21-15-00121/)

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56ASM-0012 | Isolated rat heart function after new cardioplegic solution perfusion

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Background: Cardioplegic heart failure is the most popular method of providing open-heart surgery. Negative changes of ischemia and reperfusion are reduced by quality cardioplegic protection. There is no consensus what types of cardioplegic solutions (CPS) is better. Unfortunately, studies of various cardioplegic solutions are carried out on different experimental models, which makes difficult comparison them with each other. The aim of our study was to evaluate the efficacy of created in Kazan Federal University new extracellular crystalloid CPS in the experiments on isolated rat heart model.

Materials and Methods: Isolated hearts were perfused on a Langendorff apparatus (ADInstruments) with an oxygenated Krebs-Henseleit solution (KH) (37°C, pH = 7.3-7.4) at a constant pressure of 80-82 mmHg. After stabilization of the heart activity, the initial values were recorded. The work was performed according to the following protocol: new solution was administered for 3 minutes, then ischemia was prolonged for 20 minutes, then the heart perfusion was resumed with KH solution. The heart rate was recorded during 40 minutes of reperfusion. The assessment of the contractility of the myocardium was carried out according to the indicator of left ventricular developed pressure (LVDP). The signals were recorded on the PowerLab 8/35 setup using the "LabChart Pro" program. Statistical processing of the obtained results was carried out using the Student's t-test.

Results: Asystole was achieved within 1 minute of CPS administration. Recovery of spontaneous cardiac activity after myocardial ischemia induced by the new CPS occurred within the first minute of reperfusion in 100%