

## **The role of computed tomography angiography in the diagnosis of anomalies of the inferior vena cava. Clinical observations**

Kurochkin S., Zidikhanov D.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

This paper presents the results of clinical observation of the abnormalities of the inferior vena cava (IVC) incidentally detected in patients with various pathologies and severity during both emergency and planned examination using the equipment with various technical parameters. Abnormal IVC is its breakage at various segment levels with the continuation in the azygous or semizygous vein; it can be incidentally detected during X-ray studies. The computer-tomographic angiography (CT angiography, CTA) potential in identifying this type of vascular anomaly, rare and often asymptomatic, is of particular interest. At the same time, its relative simplicity, the use of different protocols of research and setups do not limit the capabilities, and indicate the universality of the method. A brief history and a literature review of this issue have been provided. The first publication describing the changes in anatomical structure (congenital abnormalities) of IVC were found in XVIII century in the writings by John Abernethi (UK, 1793). Certainly, today there are many methods of diagnosis that allow suspecting, identifying and assessing the nature of vascular pathology (abnormality). We believe that CT angiography has opened up new opportunities and horizons for the detection of vascular disease, including various abnormalities.

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### **Keywords**

CT angiography, IVC abnormality, IVC dysplasia, Phlebography