

Features of Renal Hemodynamics in Children with Renal Colic

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Abstract

The use of Doppler technology in patients with renal colic is known since the mid 2000s, with Doppler technology, mainly used to actually visualize small concretions in the lumen of the urinary tract based on a twinkling-artifact. Also in many publications there are materials on the change in the parameters of arterial renal blood flow in children with acute urinary tract obstruction in the form of a reliable increase in the parameters of peripheral resistance. Venous renal blood flow has not been studied. In addition, almost all studies concern only the adult contingent of patients. In the own study, the first experience of a comprehensive assessment of renal blood flow in children with acute urinary tract obstruction in the dynamics of the pathological process is presented. A reliable increase in the resistive characteristics of arterial renal blood flow during an acute period of obstruction and a sharp increase in the venous blood flow rate in interlobar veins on day 2–3 from the onset of the disease are shown. In a single case a child with left-sided renal colic has a massive renoretoperitoneal shunt of venous blood.

Key words: Ultrasound Diagnostics, Children, Renal Colic.

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