

## Clinical effectiveness to use of peritoneal dialysis in children with ARF after surgical correction of congenital heart defects

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### Abstract

**Key:** congenital heart disease, children, surgical correction, acute renal failure, peritoneal dialysis.

The purpose of research - determine the clinical efficacy of peritoneal dialysis (PD) in children with acute renal failure after correction of complex congenital heart disease (CHD).

Methods - examined 52 patients aged 1 month. up to 4 years on the background with ARF after cardiac surgical correction of CHD, who were selected in 2 groups: group 1 - 30 children without PD, 2nd group - 28 children with PD. Children with oligoanuria in both groups conducted diagnostic tests of blood levels of urea and creatinine determination of creatinine clearance and urea clearance, echocardiography-control study to determine the hemodynamic status, determining the gas composition, and acid-base balance of blood electrolytes before and after intensive therapy (group 1), using PD (group 2).

Results. In group 1, the level of azotemia (creatinine clearance and urea clearance) persisted for more than 7 days, while in group 2, normalization of urea and creatinine clearance was observed even on the 4th day.

Improvement of hemodynamic parameters (heart preload reduction by 22%) was observed in group 2. Improved gas exchange in lung function observed in the 2nd group.

### Biography:

Vagif Magomedeminovich Ibraghimov, Professor PhD, Department of Faculty and Hospital Pediatrics, Head of Educational Department of Dagestan State Medical University, Makhachkala, Dagestan, Russia. He has 40 publications. Main areas of research work are bladder dysfunction and its role in the development of pyelonephritis in children, mechanisms for the development and progression of diabetic nephropathy, pharmacology of nephroprotectors

### Publications

1. "Comparative evaluation of some methods renal replacement therapy in patients in critical condition after surgery on the heart and blood vessels." *J. Thoracic and Cardiovascular Surgery* 1997; 2: 104-105. (Al. Grigor'yants RG, Abrahamian MV, Mikhailova IL, Timokhov BC, Zverev DV Golenishtchev II, Yarustovsky MB)
2. "Significance of biochemical criteria in the diagnosis of acute renal failure in the postoperative period of cardiac surgery patients." Second annual session of NC MHS them. AN Bakuleva RAMS Russian Conference of Young Scientists, Moscow, May 1998, p. 91 (al. Mikhailova IL, Golenishtchev II, Yarustovsky MB, Grigor'yants RG)
3. "Peritoneal dialysis in children with the syndrome of hydration after correction of complex congenital heart disease." Second annual session of NC MHS them. AN Bakuleva RAMS Russian Conference of Young Scientists, Moscow, May 1998, p. 156 (al. Golenishtchev II)

**Citation:** Mekenbaeva R.T, Clinical effectiveness to use of peritoneal dialysis in children with ARF after surgical correction of congenital heart defects; Global Nephrologists Meeting; January 18, 2021