

THE ROLE OF DYNAMIC RENAL SCINTIGRAPHY IN ASSESSING TREATMENT TACTICS IN CONGENITAL HYDRONEPHROSIS IN CHILDREN

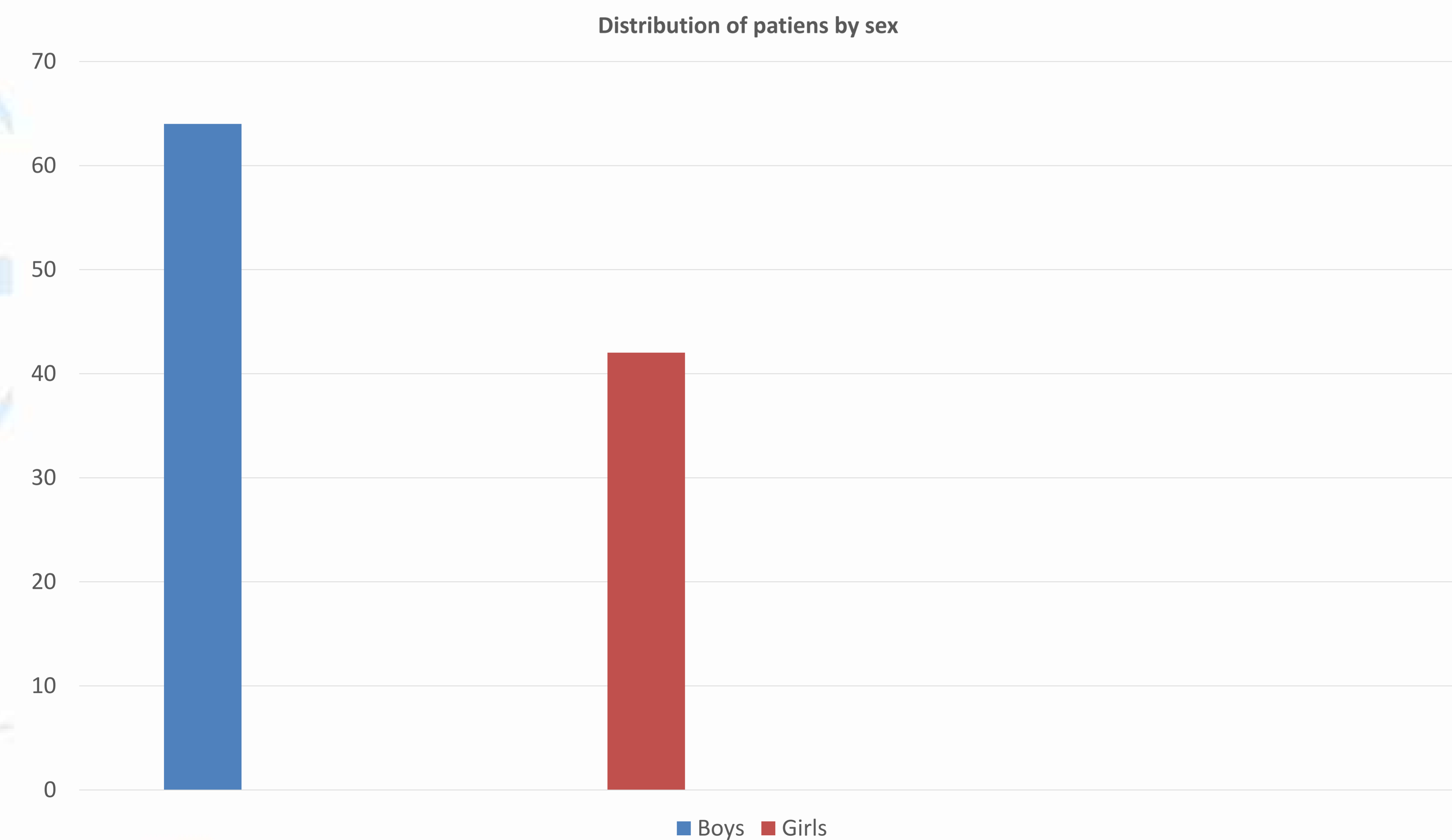
Authors Adrian Revenco, Boris Curajos, Jana Bernic, Elena Krušelnițkaia

Introduction the choice of treatment tactics in advanced congenital hydronephrosis in children remains a current issue in pediatric urology. Widely used imaging examinations (renal ultrasound, urography i /v) are insufficient to assess renal function.

Keywords dynamic renal scintigraphy, radiopharmaceutical (PRF), hydronephrosis.

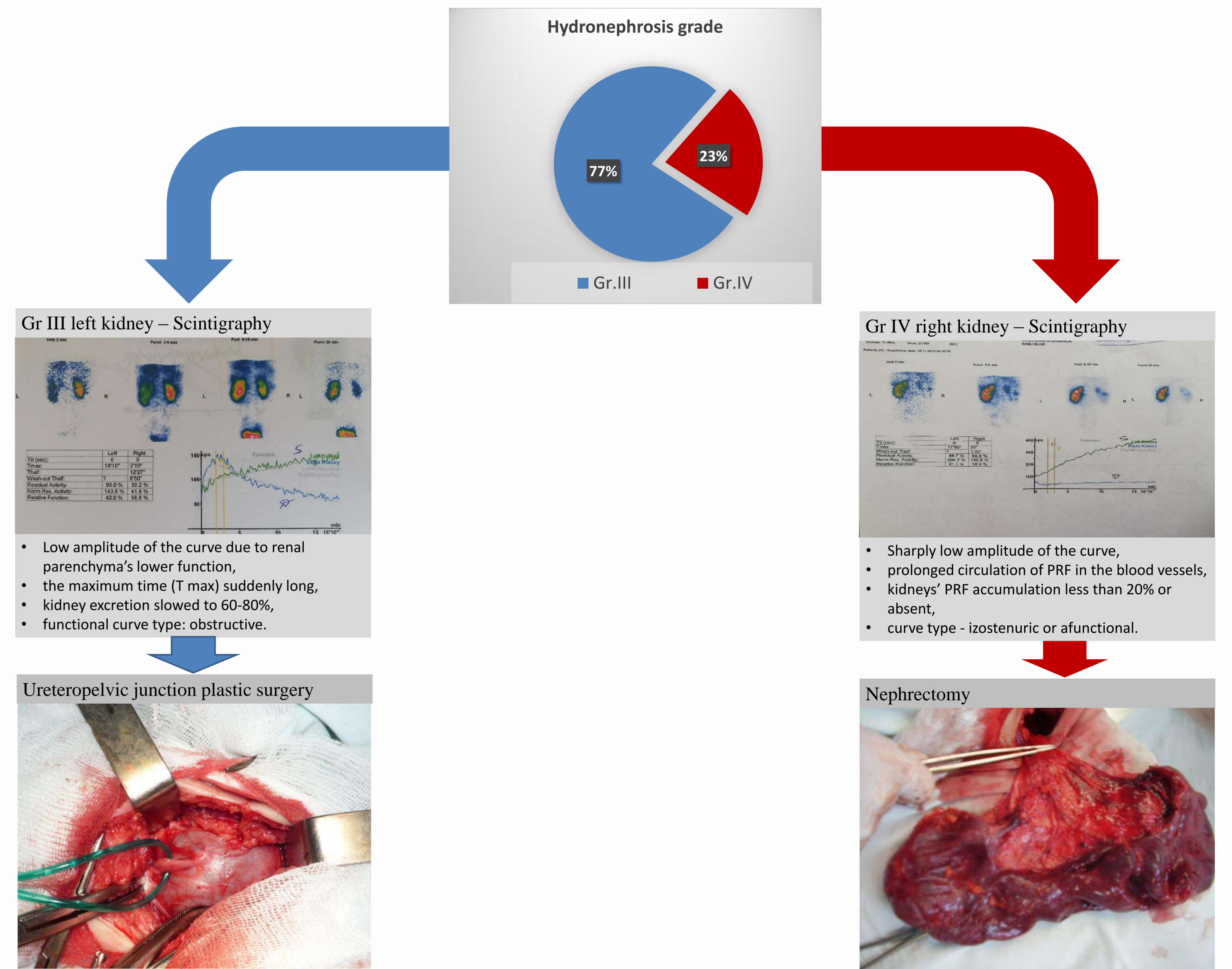
Purpose to analyze the role of dynamic renal scintigraphy in determining renal function and assessing the hydronephrosis surgical treatment tactics in children.

Material and methods a retrospective analysis of 106 observation sheets of patients, operated with hydronephrosis in IMSP IM and C, urology department between 2016–2018. The study group included 42 girls and 64 boys, aged between 3 months and 17 years. All patients were examined, including through dynamic renal scintigraphy.



Results

- In 82 (77%) patients with hydronephrosis **grade III**, the amplitude of the curve was low due to renal parenchyma's lower function, the maximum time (T max) was suddenly long and the excretion of the kidney slowed to 60-80%. Functional curve of the kidney was determined to be **obstructive type**. **Ureteropelvic junction plastic surgery** was performed to **preserve the kidney**.
- In 24 (23%) patients, with hydronephrosis **grade IV**, the amplitude of the curve was sharply low, with a prolonged circulation of PRF in the blood vessels. The kidneys' **PRF accumulation** was less than 20% or absent. Functional curve of the kidney - **izostenuric or afunfunctional type**. **Nephrectomy** was performed on this group of patients.



Conclusions

Dynamic renal scintigraphy provides the most informative percentage data in the assessment of renal function. The determination of the renal parenchyma in hydronephrosis is decisive for the choice of surgical treatment tactics - plastic or nephrectomy.