

ROBOTIC-ASSISTED TREATMENT OF SIMPLE RENAL CYSTS

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AIM

Demonstration of the capabilities of robot-assisted surgery for simple renal cysts

MATERIALS AND METHODS

Robot-assisted kidney cyst fenestration: 27
Male : 17 (62.9%)
Female: 10 (37.1%)
Age, years: 13 [8; 15]
Weight, kg: 47 [27; 56]
The average size of the cyst, according to ultrasound before surgery, mm: 70 [6; 15]

Sclerotherapy cyst n 96

- Paraneural hematoma (n 4)
- Hematuria (n 2)
- Reccurrinsy (n 14)
- Scarring of the parenchyma (n 7)
- without complications (n 69)



GENERAL INFORMATION

Occurrence: 0.22 – 0.55%
Bosniak types I – II account for 95% of all simple kidney cysts
7.2% of type I cysts transform into type II cysts

Risks of malignancy:
Type I cysts: less than 1%
Type II cysts: 3-10%
Type III cysts: 40-60%
Type IV cysts: 85-100%

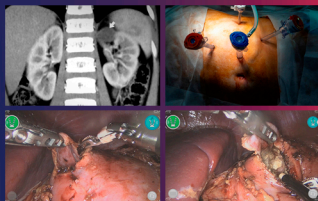
Fenestration of cyst n 44

- Paraneural hematoma (n 0)
- Hematuria (n 0)
- Reccurrinsy (n 0)
- Scarring of the parenchyma (n 1)
- without complications (n 43)



*Viktor N. Stalmahovich, Lyudmila V. Angarkhaeva, Sergey N. Yakovchenko. Comparative analysis of surgical treatment outcomes in children with solitary renal cysts. Russian Journal of Pediatric Surgery, Anesthesia and Intensive Care. 2019;9(4):57-68 <https://doi.org/10.30946/2219-4061-2019-9-4-57-68>

ROBOT-ASSISTED FENESTRATION OF A SIMPLE CYST OF THE UPPER POLE OF THE KIDNEY



N 18	AGE, YEARS	WEIGHT, KG	OPERATION TIME, MIN	DOCKING TIME, MIN	ICU TIME, HOURS	DURATION OF HOSPITALIZATION, DAYS
	13 [10; 15]	44[30; 51]	55 [50; 95]	10 [10; 15]	10 [10; 15]	3 [3; 4]

ROBOT-ASSISTED FENESTRATION OF A SIMPLE CYST OF THE LOWER POLE OF THE KIDNEY



N 18	AGE, YEARS	WEIGHT, KG	OPERATION TIME, MIN	DOCKING TIME, MIN	ICU TIME, HOURS	DURATION OF HOSPITALIZATION, DAYS
	13 [10; 15]	44[30; 51]	55 [50; 95]	10 [10; 15]	10 [10; 15]	3 [3; 4]

CONCLUSION

Fenestration is the most optimal treatment for simple kidney cysts. Currently, we perform fenestration of kidney cysts using robotics, and we note the high efficiency and safety of this method