

Vycril 4.0 stitches, and for the anterior wall V-lock 4.0. To perform these continuous sutures we utilized the flexibility of the robotic DEX needleholder with seven degrees of freedom of movement. The ureteropelvic anastomosis was sutured over a DJ stent inserted retrogradely. The operation time was 140 minutes. The urinary catheter was removed on the 3rd postoperative day, the surgical drain a day after and the DJ-stent 6 weeks after the operation on an outpatient basis. Compared to the current robotic systems, both purchase and operating prices of the used robotised devices are many times lower. The purchase cost of the robotic laparoscopic system is 1.8 million Czech crowns (Kč) with the operating cost averaging 7,000 CZK per use of the instrument. While the purchase price

for the Soloassist II robotic arm, depending on the equipment, is around 2 million Czech crowns (Kč).

Conclusion: Robotic laparoscopy enables precision with the possibility of using seven degrees of freedom of movement, maintaining tactile feedback and ergonomics (comfort) of the surgeon during operation. After a short practice, even in the hands of a less experienced laparoscopist, these instruments can improve surgical results, can reduce perioperative complications and operative time. Low acquisition and operating costs ensure an interesting future for robotic laparoscopy.

KEY WORDS

Robotic laparoscopy, pyeloplasty, congenital hydronephrosis, duplex renal collecting system.

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Soutěž ČUS



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Následně budou výsledky zveřejněny v časopisu Česká urologie a na webových stránkách ČUS.