

# The experiences of Centre of Robotic Surgery in Usti nad Labem, Czech Republic with Robotic Partial Nephrectomy

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In the period August 2008 to December 2012 we performed a total of 57 operations for kidney tumors on da Vinci robotic system. These operations were carried out by three surgeons. We observed the total time of the operation, surgical and postoperative complications, need for blood transfusion, histological results and length of stay in hospital.

Histological findings: we found adenocarcinomas, renal cysts, onkocytoms, angiomyolipoms, melanoma metastases, bulky diverticulum of calyx, renal adenoma and inflammatory pseudoxantom in our group of patients. Individual histological results shown in the following table:

adenocarcinoma	pT1	6
	pT1a	25
	pT1b	11
	pT3b	1
Cystis of the kydney		6
onkocytoma		2
angiomyolipoma		2
Metastasis of melanoma		1
Divercitulum of calyx		1
Postinflamatory pseudoxantoma		1
renal tubular adenoma		1

Complications: the only complication that we noticed was bleeding. Only five patients (9.09 %) with kidney cancer suffered from heavy bleeding therefore we were forced to convert to an open performance. At nine cases (16.36 %) we had to make nephrectomy instead of a planned tumor resection because of a complicated tumor position or its size.

The mean duration of hospitalization was 4.5 days.

These types of operations were carried out by three surgeons. The average operating time was 140, 156 respectively. 161 minutes. This is the time of the operation, including docking the robot. The average operating time was 92 console, 106 respectively 110 minutes.

Da Vinci robotic system can be used for a treatment of kidney cancer and for these types of performance: radical nephrectomy and resection of kidney tumors. The benefits are mainly resection procedures. Compared to laparoscopy robot facilitates access to upper pole renal tumors and sutures them with robots easier. Interventions such as robotic resection of kidney tumors are a safe and effective method for the surgical treatment of these diseases.

