

Table S1. Characteristics of the study population by BMI category.

	BMI <30 kg/m ² n=658	BMI ≥30 kg/m ² n=114	p
Gender, n (%)			0.88
Male	326 (49.5)	55 (48.2)	
Age at nephrectomy, years	54 ± 11.0	55 ± 10.2	0.35
Blood pressure			
Systolic, mmHg	126.0 ± 12.5	128.7 ± 14.3	0.07
Diastolic, mmHg	75.6 ± 8.88	76.6 ± 9.58	0.27
mGFR, mL/min*1.73m²	111.5 ± 21.9	120.0 ± 24.0	0.001
Side nephrectomy			0.85
Left, n (%)	466 (71.8)	82 (73.2)	
Right, n (%)	183 (28.2)	30 (26.8)	
Previous abdominal surgery, n (%)	23 (3.5)	3 (2.6)	0.85
Surgical technique			
HALN, n (%)	570 (91.3)	105 (97.2)	0.06
HARN, n (%)	52 (8.3)	3 (2.8)	0.07
Open, n (%)	2 (0.3)	0 (0)	1.00
Duration of surgery, min.	213.0 ± 50.4	224.9 ± 50.1	0.03
Blood loss, mL	50 [50-150]	50 [50-200]	0.76
HLOS, days	4 [4-5]	5 [4-5]	0.05
Conversion rate, n (%)			
No, primary HALN	558 (89.4)	104 (96.3)	0.04
No, primary HARN	50 (8.0)	3 (2.8)	0.08
No, primary open	-	-	
Conversion HARN to HALN	12 (1.9)	1 (0.9)	0.74
Conversion HARN to open	-	-	
Conversion HALN to open	3 (0.5)	0 (0)	1.00
Conversion HALN to HARN	1 (0.2)	0 (0)	1.00

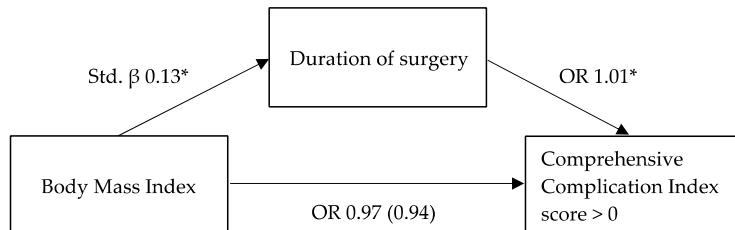
Values of variables are given as mean ± standard deviation, median [interquartile range], or n (%)

BMI, Body Mass Index (kg/m²); BSA, Body Surface Area (m²); mGFR, measured Glomerular Filtration Rate (mL/min*1.73m²); HALN, Hand-Assisted Laparoscopy; HARN, Hand-Assisted Retroperitoneal Nephrectomy; HLOS, Hospital Length of Stay.

Table S2. Overview of complications.

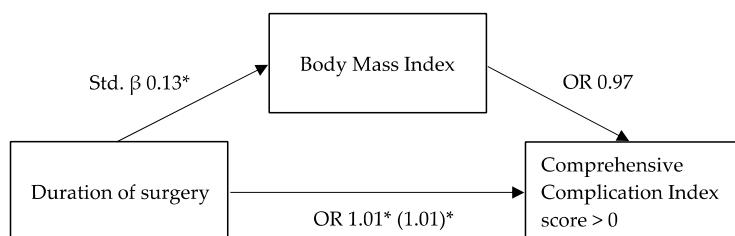
Complication	Incidence n (%)
Perioperative bleeding	19 (22)
Iatrogenic spleen lesion	13 (15)
Urinary retention	7 (8)
Iatrogenic colon lesion	5 (6)
Postoperative bleeding (hematoma)	4 (5)
Pneumonia treated with antibiotics	4 (5)
Hypokalemia	4 (5)
Postoperative pain treated with analgesics	3 (4)
Fecal retention	2 (2)
Nausea without intervention	1 (1)
Nausea with intervention	1 (1)
Abscess	1 (1)
Postoperative pancreas leakage	1 (1)
Chyle leakage	1 (1)
Fever and irritated peritoneum	1 (1)
Foreign object left in patient	1 (1)
Wound infection	1 (1)
Perioperative hypotension	1 (1)
Post-operative vasovagal collapse	1 (1)
VRE infection	1 (1)
Postoperative omental necrosis	1 (1)
Chest pain	1 (1)
Lung embolus	1 (1)
Urinary tract infection	1 (1)
Prolonged treatment with drain	1 (1)
Wound leakage	1 (1)
Iatrogenic bladder lesion	1 (1)
Iatrogenic pancreas lesion	1 (1)
Atelectasis	1 (1)
Pneumothorax	1 (1)
Renal insufficiency	1 (1)
Perioperative hypothermia	1 (1)
Indicated relaparoscopy	1 (1)

Figure S1. Standardized Regression Coefficients and Odds Ratios for the Relationship Between Body Mass Index and Comprehensive Complications Index score above zero as Mediated by Duration of Surgery.



* $p < 0.05$

Figure S2. Standardized Regression Coefficients and Odds Ratios for the Relationship Between Duration of Surgery and Comprehensive Complications Index score above zero as Mediated by Body Mass Index.



* $p < 0.05$