

MP49-19: Late hospital readmission after radical cystectomy and ileal conduit urinary diversion: a time-dependent analysis in 1400 patients

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INTRODUCTION

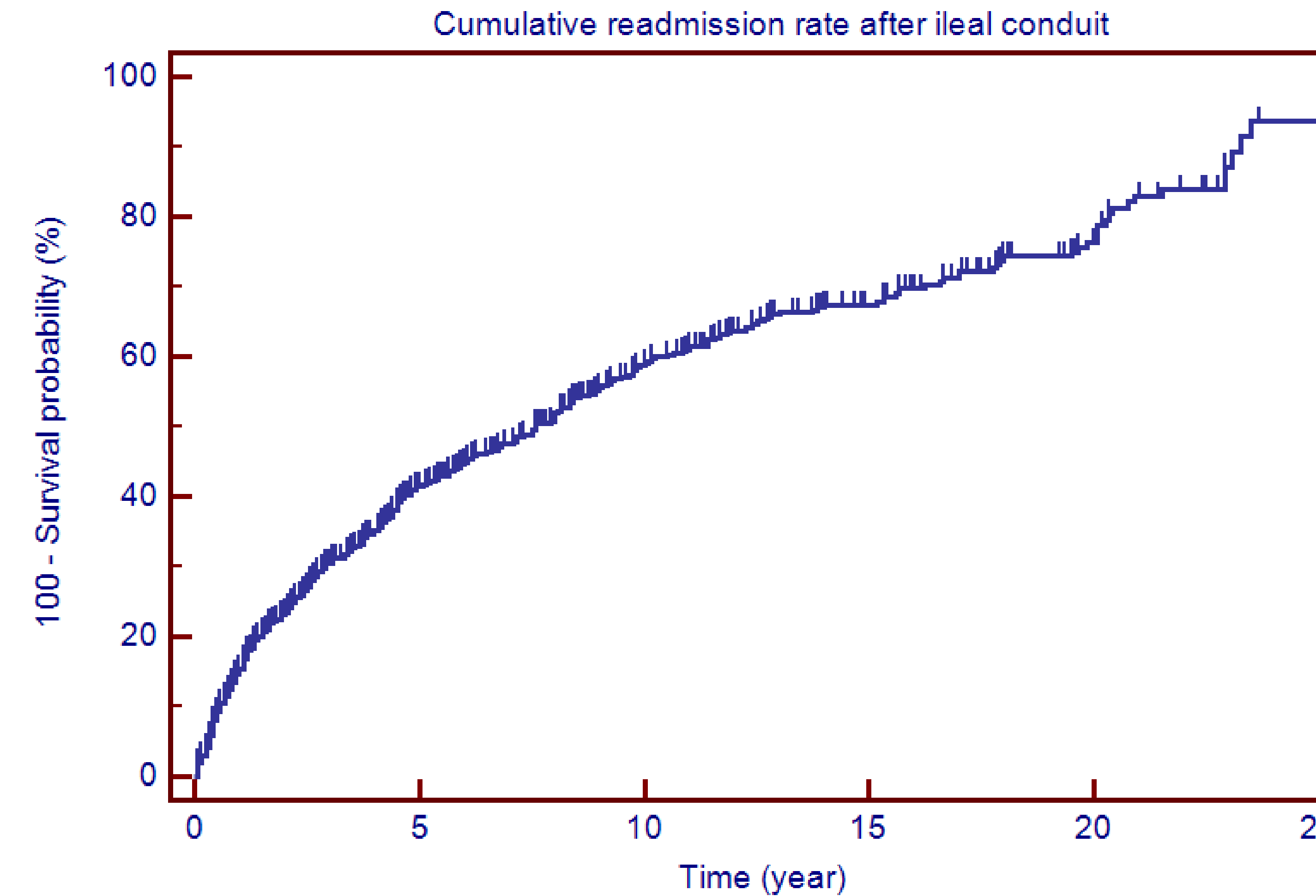
Ileal conduit (IC) urinary diversion is the most commonly performed procedure after radical cystectomy.

Paucity of literature exists about the complications requiring late hospital readmission (LHR).

We sought to categorize the incidence, reasons and predictors of late hospital readmission in a large series of IC.

PATIENTS AND METHODS

- We utilized a prospectively maintained database for patients underwent radical cystectomy and IC to determine patients readmitted later than one month after hospital discharge date in a single center.
- Complications requiring LHR were categorized based on the modified Clavien system (Grades I, II: Medical management; IIIa and IIIb: intervention under local and general anesthesia, respectively; IVa and IVb: ICU admission for single and multiorgan failure, respectively).
- Time-dependent analysis was performed using Kaplan-Meier curve and log-rank test. Independent predictors were identified using Cox regression model



Number at risk	1400	338	160	81	30	2
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No (%)	I	II	IIIa	IIIb	IVa	IVb	Total
Pyelonephritis	58 (4.1)	118 (8.4)			11(0.8)	1(0.1)	188 (13.4)
Urinary obstruction	48 (3.4)	59 (4.2)	43 (3.1)	6 (0.4)			156 (11.1)
Parastomal hernia	26 (1.9)	83 (5.9)		41 (2.9)		1 (0.1)	151 (10.8)
Intestinal obstruction		53 (3.8)		29 (2.1)	3 (0.2)	3 (0.2)	88 (6.3)
Metabolic acidosis		31 (2.2)			21 (1.5)	7 (0.5)	59 (4.2)
Stomal prolapse	8 (0.6)	17 (1.2)		24 (1.7)			49 (3.5)
Lymphocele	31 (2.2)						31 (2.2)
UTUC				30 (2.1)			30 (2.1)
Stomal bleeding	1 (0.1)	25 (1.8)	1 (0.1)		1 (0.1)	2 (0.1)	30 (2.1)
Nephrolithiasis	17 (1.2)	1 (0.1)	6 (0.4)	4 (0.3)			28 (2)
Incisional hernia	3 (0.2)	2 (0.1)		3 (0.2)			8 (0.5)
							818 (58.2)

UTUC: Upper tract urothelial carcinoma

Grades according to modified Clavien system.

RESULTS

- 1400 patients underwent surgery between 1990 and 2016 were analyzed.
- A total of 818 events required LHR in 535 (38.2%) patients including 188 patients admitted for more than one reason.
- The LHR-free probabilities were 84.6%, 58.5%, 41% and 23.6% at 1, 5, 10 and 20 years, respectively (**Fig. 1**).
- Pyelonephritis, urinary obstruction and parastomal hernia were the main causes of LHR occurring in 13.4%, 11.1% and 10.8%, respectively (Table 1).
- On multivariate analysis,**
 - older age at cystectomy (>60 years) (Hazards ratio [HR]: 1.3; 95% Confidence interval [CI]: 1.1-1.7; p=0.01) and
 - preoperative hydronephrosis (HR: 1.4; 95%CI: 1.1-1.8; p=0.007),
 - high-grade postoperative complications (HR: 3.3; 95%CI: 2.4-4.4; p<0.001) and
 - lympho-vascular invasion (HR: 1.7; 95%CI: 1.2- 2.3; p<0.001) were independent predictors of LHR.

CONCLUSIONS

LHR is a significant problem after IC and has cumulative incidence that increases overtime. Vigilance at follow-up for the prevention and treatment of pyelonephritis, urinary obstruction and parastomal hernia might mitigate LHR. Life-long follow-up is mandatory for adequate management of these events.