



Original Article

# Standardized report for early complications of radical prostatectomy

Wei-Ming Cheng<sup>a</sup>, Tzu-Ping Lin<sup>a,b,\*</sup>, Chih-Chieh Lin<sup>a,b</sup>, Eric Yi-Hsiu Huang<sup>a,b</sup>,  
Hsiao-Jen Chung<sup>a,b</sup>, Junne-Yih Kuo<sup>a,b</sup>, William J.S. Huang<sup>a,b</sup>, Yen-Hwa Chang<sup>a,b</sup>,  
Alex T.L. Lin<sup>a,b</sup>, Kuang-Kuo Chen<sup>a,b</sup>

<sup>a</sup>Division of Urology, Department of Surgery, Taipei Veterans General Hospital, Taipei, Taiwan, ROC

<sup>b</sup>Department of Urology, School of Medicine, and Shu-Tien Urological Research Center, National Yang-Ming University, Taipei, Taiwan, ROC

Received April 3, 2013; accepted October 14, 2013

## Abstract

**Background:** Radical prostatectomy (RP) is one of the curative treatment options for patients with prostate cancer to achieve long-term survival, but it is accompanied by potential complications. The Martin criteria used as a format for reporting complications has become standard in recent years. However, it has not been applied in RP in Asian countries. In the present study, we investigated the early complications of RP developing within 90 days in our institute according to the Martin criteria.

**Methods:** Between January 2003 and November 2011, patients with organ-confined adenocarcinoma of the prostate who received RP in our institute were retrospectively reviewed. The operation was done as open RP, or minimally invasive RP, including laparoscopic RP and robot-assisted laparoscopic RP (RaLP). The preoperative, operative, postoperative, and pathological parameters were recorded for analysis. Definitions of complications were adopted from previous reports. Surgical and medical complications developed within 90 days postoperatively were identified respectively; severity of each complication was classified according to Clavien–Dindo classification. Clavien–Dindo classification grade III or higher complications were viewed as major complications.

**Results:** A total of 359 patients were included; 280 (78%) underwent open RP, 45 (12.5%) received laparoscopic RP, and 34 (9.5%) had RaLP. The overall complication rate was 40.1%, and the major complication rate was 13.1%. There was no surgical mortality. Diarrhea requiring conservative treatment (13.6%), minor urine leakage (9.5%), and gout attack (4.2%) were the leading complications. Minimally invasive RP had higher rates of lymph leakage ( $p = 0.015$ ) and upper-extremity neuropathy ( $p = 0.048$ ). Body mass index  $>25 \text{ kg/m}^2$  and use of neoadjuvant hormone therapy were predictors for overall and major complications, whereas diabetes mellitus also predicted the development of major complications. Besides lower case volume and learning curve for RaLP, patients' higher age at surgery and higher risk for disease progression compared to the Western series may be responsible for the higher complication rates.

**Conclusion:** The early complication rates of RP in our patients were slightly high compared to the Western series. By standardized report, being overweight, diabetes mellitus, and use of neoadjuvant hormone therapy were identified as predictors of early complications in our series.

Copyright © 2014 Elsevier Taiwan LLC and the Chinese Medical Association. All rights reserved.

**Keywords:** complications; prostatectomy; prostatic neoplasms

## 1. Introduction

Prostate cancer is one of the leading malignant neoplasms among male Taiwanese. Treatment should be tailored individually based on the risk of disease progression, life expectancy at diagnosis, and possible complications of each treatment modality, as well as the patient's preference and expected compliance. As the screening test with serum

Conflicts of interest: The authors declare that there are no conflicts of interest related to the subject matter or materials discussed in this article.

\* Corresponding author. Dr. Tzu-Ping Lin, Division of Urology, Department of Surgery, Taipei Veterans General Hospital, 201, Section 2, Shih-Pai Road, Taipei 112, Taiwan, ROC.

E-mail address: [tplin63@vghtpe.gov.tw](mailto:tplin63@vghtpe.gov.tw) (T.-P. Lin).

Table 1  
Definitions of complications of radical prostatectomy.

System	Complications	Severity <sup>a</sup>	Definitions/management
Wound	Prolonged wound pain	I	Intravenous opioid analgesics needed for 7 d or more postoperatively
	Wound dehiscence	IIIa	Wound debridement under local anesthesia in operation room
	Wound infection	I	Wet dressing as wound care
	Abscess formation	IIIa	Proved by sonography and treated with aspiration
	Prolonged lymph secretion	I	Drainage needed for >14 d, without evidence of anastomosis leakage
	Suture of drainage catheter	IIIb	Clinically evident, and explorative laparotomy for removal
Urology	Urinary leakage	I	Proved by cystography, and Foley catheter retention for >14 d
		IIIa	Same as above, and change of Foley catheter with cystoscopy
		IIIb	Same as above, and repair under general anesthesia
	Significant hematuria	I	More severe than usual condition
		II	Resulting in acute urinary retention; Toomey irrigation and blood transfusion needed
	UTI/epididymitis	II	Clinically evident with positive urine culture, treated with intravenous antibiotics
	Acute urinary retention	I	Not due to hematuria; estimated residual urine >150 mL or manual reinsertion of Foley catheter
	Meatal stenosis	IIIa	Treated with urethral sounding under local anesthesia
	Anastomotic stenosis	II	Proved by cystoscopy, and urethral sounding under local anesthesia
		IIIa	Proved by cystoscopy, and transurethral incision under spinal anesthesia/general anesthesia
	Hydronephrosis	IIIa	Proved by sonography, and percutaneous nephrostomy or double-J stenting needed
	Distal ureteral injury	IIIb	Intraoperative repair
	Dislodgment of Foley catheter	IIIa	Cystoscopy for reinsertion
	Spontaneous clip voiding	I	Reported by the patient
Stitches in the urinary bladder	IIIa	Removed by cystoscopy	
Hematology	Postoperative blood transfusion	II	Postoperative hemoglobin <9–10 g/dL, or decreased by >3 g/dL, and blood transfusion was done
	Postoperative bleeding	IIIb	Reoperation because of postoperative bleeding
	DIC	II	Clinically evident and proved by laboratory examinations
Neuromuscular disease	Delirium	II	Clinically evident, treated with haloperidol
	Gout attack	II	Clinically evident, treated with colchicine
	Upper-extremity neuropathy	I	Observation and rehabilitation
	Lower-extremity neuropathy	I	Observation and rehabilitation
	Obturator nerve injury	IIIb	Intraoperative nerve repair
	Rhabdomyolysis	II	Elevation of serum creatinine and myoglobin, treated with hydration and alkalization of urine
	Pressure sore	I	Grade I pressure sore, under observation and changing position
		IIIa	Pressure sores of grade II or more, and dressing needed
Compartment syndrome	IIIb	Emergent fasciotomy needed	
Nephrology	Hyponatremia	I	Treated with electrolytes supplement
	Acute renal insufficiency	I	Postoperative serum creatinine >1.5 mg/dL in patients with preoperative normal serum creatinine level
Gastroenterology	Injury to rectal serosa	I	Intraoperative superficial injury without repair
	Bowel injury	IIIb	Intraoperative bowel injury with repair
	Ileus	II	Prolonged nil by mouth postoperatively and gastrointestinal decompression needed
		II	Clinically suspected, treated with proton pump inhibitor
	Stress ulcer	II	Positive occult blood reaction in stool or gastric juice, treated with proton pump inhibitor
	Diarrhea	IIIa	Upper GI endoscopy needed for hemostasis
		I	Observation without medical treatment
		II	Treated with antidiarrheal medication
	Elevated liver function tests	I	Observation without medical treatment
Acute cholecystitis	IIIa	Clinically evident, treated with percutaneous drainage	

(continued on next page)

Download English Version:

<https://daneshyari.com/en/article/3476375>

Download Persian Version:

<https://daneshyari.com/article/3476375>

[Daneshyari.com](https://daneshyari.com)