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Original Article

The effects of enhanced fast-track nursing on the recovery and nursing satisfaction of patients undergoing radical total cystectomy for bladder cancer

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Abstract: Objective: To explore the effects of enhanced fast-track nursing (EFTN) on the recovery and nursing satisfaction of patients undergoing radical total cystectomy (RTC) for bladder cancer (BC). Methods: The FusionInsight Hadoop data processing platform was used to extract the information of 102 BC patients, and the patients were divided into two groups: Forty-five patients in group A (routine nursing) and 57 patients in group B (EFTN). Self-rating depression scale (SDS) and self-rating anxiety scale (SAS) before and after nursing, postoperative recovery profile and the incidences of adverse reactions in the two groups were observed and recorded. Clinical information and nursing satisfaction were compared between the two groups. Results: There was no statistical difference in clinical information between the two groups (all $P > 0.05$). The two groups showed similar baseline clinical characteristics, SAS and SDS before nursing. After nursing, both groups showed improvement in SAS and SDS and group B showed more changes in SAS and SDS before/after differences with higher after-nursing SAS and SDS compared with those in group A (all $P < 0.05$). Length of hospital stay, feeding time, out of bed activity time and time to first exhaust in group A were significantly longer than those in group B (all $P < 0.05$). The total incidence of adverse reactions in group B was lower than that in group A ($P = 0.001$), and nursing satisfaction of group A was lower than that of group B ($P = 0.013$). Conclusion: EFTN can promote postoperative recovery of BC patients, improve their anxiety and depression, reduce adverse reactions, and improve nursing satisfaction.

Keywords: Rapid rehabilitation nursing, bladder cancer, nursing satisfaction

Introduction

As the most common clinical malignant tumor of the urinary system, bladder cancer (BC) has the highest incidence among all malignant tumors of the urinary system [1]. According to the American statistical report of cancer in 2017, 79,030 new BC patients and 16,870 deaths were newly identified [2], while the Chinese statistical report of cancer in 2015 revealed 80,500 new BC patients and 32,900 deaths, with a trend of increase year by year [3]. Currently, the treatment for BC is based on radical total cystectomy (RTC), which improves therapeutic effects through complete resection of the tumor, pelvic lymph nodes and urinary diversion [4]. However, the surgery takes a long time with serious injury to the pelvic area, and patients have different degrees of postoperative complications, seriously affecting postoperative rehabilitation and quality of life of the patients. Moreover, as patients have little awareness of the surgery, they are prone to preoperative anxiety, depression and other negative emotions, which greatly interferes with patients' treatment compliance, increases the surgical difficulty and prolongs the length of hospital stay [5, 6].

With the improvement of medical advances and awareness, and quality of life, people have an increasingly greater health consciousness. More and more people believe that quality of life is an important part of health care [7]. In addition, with the continued improvement of people's quality of life, nursing quality and requirements are increasingly high, routine nursing in the clinic can no longer meet the

needs of patients. How to speed up the recovery of patients has become an important problem for medical staff [8]. Enhanced fast-track nursing (EFTN) is a nursing model introduced in China in recent years, mainly including three stages (before, during and after surgery), psychological nursing and other aspects are included [9]. Its main purpose is to accelerate postoperative rehabilitation, shorten the length of hospitalization stay and reduce the incidence of postoperative complications [10]. Das-Neves-Pereira et al. found that EFTN effectively improved the occurrence of postoperative complications in patients with lung cancer resection [11]. Besides, studies have shown that EFTN for patients undergoing laparoscope-assisted radical gastrectomy can effectively improve patients' nutritional status and reduce postoperative pressure [12, 13]. However, at present, there are few reports on EFTN after RTC for BC both in China and abroad. Therefore, this study explored the effects of EFTN after RTC for BC, in order to provide more evidence.

Materials and methods

Clinical information

A retrospective analysis was performed on 102 BC patients admitted to The Central Hospital of Wuhan, Tongji Medical College, Huazhong University of Science and Technology from December 2014 to December 2017, including 45 patients in group A (routine nursing) and 57 patients in group B (EFTN). The clinical manifestations, laboratory examination, imaging examination and pathological examination results of all patients were consistent with indications of BC surgical resection. The pathological staging of this study was based on the TNM staging in the 6th edition published by the Union for International Cancer Control in 2002 [14]. This study was approved by the Medical Ethics Committee of The Central Hospital of Wuhan, Tongji Medical College, Huazhong University of Science and Technology, and all patients or their family members signed the informed consent.

Inclusion criteria: Patients with complete clinical information; age < 80 years old; patients without other malignant tumors; patients and their family who cooperated with treatment.

Exclusion criteria: Patients with mental or cognitive disorders; patients with gastrointestinal disease; patients with congenital immunodeficiency and physical disability.

Sources of medicines and instruments

Metronidazole (Hubei Huazhong Pharmaceutical Co., Ltd., China), streptomycin (Dalian Merro Pharmaceutical Co., Ltd., China), polyethylene glycol electrolytes powder (Staidson (Beijjing) Biopharmaceuticals Co., Ltd., China), and glucose and Sodium Chloride Injection (500 mL: 25 g: 4.5 g/bottle; Sichuan Kelun Pharmaceutical Co., Ltd., China).

Nursing methods

Routine nursing was performed in group A, and the details were as follows. Health education was given to patients for knowledge about the surgery. Preoperative nursing: the patients were on a semiliquid diet two days before surgery, and were given metronidazole (0.4 g) + streptomycin (0.5 g) orally once a day for three days before surgery. They were instructed to fast one day before surgery. Appropriate intravenous infusions of glucose was performed before surgery. The patients were given an enema cleaning in the last evening and early morning before surgery, with stomach tube retaining. Intraoperative nursing: the ideal operating room temperature was maintained, and timely fluid administration was given to patients. Postoperative nursing: the stomach tube was removed after anal exsufflation, and patients were on a liquid diet after intestinal exhaust and confirmation of gastrointestinal functional recovery. In the early postoperative period, it was not recommended for the patients to get out of the bed until they recovered to a certain degree. The patient was given analgesics when they couldn't bear the pain. The abdominal drainage tube remained for 3-5 days and then removed.

EFTN was conducted in group B and the details are as follow. Psychological nursing and health education: a rapid recovery plan was made, and timely communication with patients' families was performed. A personalized health education program was customized, possible conditions in the process of surgery were told to patients, and the questions raised by patients were explained one by one to avoid anxiety, depression and other adverse emotions of patients. Preoperative nursing: There were no strict requirements of fasting and drinking pro-

hibition before surgery for patients, but to guide them to eat high-protein, high-calorie and high-vitamin foods before surgery. Patients were given a 2,000 mL solution of polyethylene glycol electrolytes powder + warm water 2 h before surgery, 600 mL for the first time, and 250 mL every 15 min until the end of drinking. Patients were not routinely intubated before surgery. Intraoperative nursing: the operating room temperature was kept at 25°C, intravenous fluid and abdominal cavity flushing fluid were heated up to 35°C and 40°C, respectively. According to the patient's situation, the amount of fluid infusion was controlled for individualized fluid infusion, and the patient was given a thermal blanket, in order to maintain intraoperative body temperature. The drainage tube was set based on the patient's situation. Postoperative nursing: after the patient was awake, 6 h after surgery and when intestinal rumbling appeared under abdominal auscultation, 5% glucose and Sodium Chloride Injection (400 mL) was taken orally. Fluid diet was conducted on the first day after surgery. Patients performed lower limb activities on the bed 6h after surgery (the immobile patients conducted passive activities with the help of their family members), and they got out of bed to perform limb activities on the first day after surgery. Postoperative epidural anesthesia (30 mL 0.25% bupivacaine, 0.2 mg fentanyl, 30 mg ephedrine, normal saline to 100 mL; injection into the analgesic pump capsule with one-time infusion) was continued conducted 24-72 h after surgery. Visual analogue scale (VAS) was used to evaluate the pain condition of patients, and the measurement was adjusted according to the pain degree. The abdominal drainage tube was maintained for 1-2 days and then removed.

Outcome measures

Main outcome measures: Self-rating depression scale (SDS) and self-rating anxiety scale (SAS) before and after nursing were observed and recorded in the two groups. The total score of the two scales is 100, and a higher score represents more severe depression or anxiety. In addition, postoperative recovery (length of hospital stay, feeding time, out of bed activity time and time to first exhaust) and total incidence of adverse reactions in the two groups were observed and recorded.

Secondary outcome measures: clinical information and nursing satisfaction were compared between the two groups. Nursing satisfaction was divided into three grades as very satisfied, satisfied, and generally satisfied. Nursing satisfaction = Number of case (very satisfied + satisfied)/total number of cases * 100%.

Statistical analysis

Statistical analysis was conducted using SPSS 22.0 software and GraphPad Prism 7 was used to draw the graphs. Count data were expressed as percent (%) and were analyzed by chi-square test. Measurement data was expressed as mean ± standard deviation ($\bar{x}$ ± sd) and were analyzed by K-S test, and all data followed a normal distribution. The measurement data between the two groups were analyzed by t test, paired t test was used for the before and after comparison of the two groups, and the rank sum test was adopted for the analysis of the rank data and were represented as Z. $P < 0.05$ indicates a statistical difference.

Results

Clinical information

There were no statistical differences in clinical information between the two groups, including gender, age, BMI, history of smoking, residence, history of operations, operation method, operation time, amount of bleeding, method of urinary diversion, and albumin level (all $P > 0.05$). See **Table 1**.

Significantly decreased SAS and SDS scores after nursing

There was no significant difference in SAS and SDS before treatment between the two groups (both $P > 0.05$). After nursing, both groups showed improvement in SAS and SDS, and group B showed more difference changes in SAS and SDS before-after differences with higher after-nursing SAS and SDS compared with those in group A (all $P < 0.05$). See **Table 2**.

Postoperative recovery profile

The length of hospital stay, feeding time, out of bed activity time and time to first exhaust in group B were shorter than those in group A, with significant differences (all $P < 0.05$). See **Figure 1**.

Table 1. Clinical information

Factor	Group A (n = 45)	Group B (n = 57)	t/x^2	P
Age (year old)	58.53 ± 10.33	60.25 ± 8.47	0.923	0.359
BMI (kg/m^2)	23.15 ± 2.21	22.94 ± 1.98	0.505	0.615
Gender (n, %)			0.034	0.853
Male	30 (66.67)	37 (64.91)		
Female	15 (33.33)	20 (35.09)		
History of smoking (n, %)			0.121	0.728
Yes	39 (86.67)	48 (84.21)		
No	6 (13.33)	9 (15.79)		
Residence (n, %)			0.171	0.679
City	37 (82.22)	45 (78.95)		
Village	8 (17.78)	12 (21.05)		
History of operation (n, %)			0.828	0.363
< 1	12 (26.67)	20 (35.09)		
≥ 1	33 (73.33)	37 (64.91)		
Operation method (n, %)			0.305	0.580
Robot	19 (42.22)	21 (36.84)		
Laparoscope	26 (57.78)	36 (63.16)		
Method of urinary diversion (n, %)			2.232	0.328
Reconstruction of bladder with ileum	30 (66.67)	30 (52.63)		
Neobladder	4 (8.89)	9 (15.79)		
Cutaneous ureterostomy	11 (24.44)	18 (31.58)		
Operation time (min)	271.51 ± 12.84	268.88 ± 11.94	1.068	0.288
Amount of bleeding (mL)	489.38 ± 13.75	493.41 ± 14.84	1.406	0.163
Albumin level (g/L)	34.25 ± 5.07	35.88 ± 5.24	1.585	0.116

Note: group A, routine nursing; group B, enhanced fast-track nursing; BMI, body mass index.

Table 2. SAS and SDS before and after nursing (score)

Group	Group A (n = 45)	Group B (n = 57)	t	P
SAS				
Before nursing	59.24 ± 14.48	57.71 ± 12.41	0.176	0.860
After nursing	44.03 ± 11.10*	29.12 ± 12.98*	6.134	< 0.001
Before-after difference	15.20 ± 3.52	26.94 ± 4.38	14.643	< 0.001
SDS				
Before nursing	45.32 ± 9.39	48.11 ± 9.64	1.468	0.145
After nursing	32.57 ± 5.93*	21.17 ± 5.41*	10.128	< 0.001
Before-after difference	12.75 ± 3.72	28.59 ± 3.49	22.108	< 0.001

Note: group A, routine nursing; group B, enhanced fast-track nursing. SAS, self-rating anxiety scale; SDS, self-rating depression scale. Compared with pre-nursing, *P < 0.05.

Total incidence of adverse reactions and nursing satisfaction

Nineteen patients in group A had adverse reactions, and 6 patients in group B. The total incidence of adverse reactions in group B was obviously lower than that in group A, with a significant difference (P < 0.05). Moreover, nursing satisfaction of group A was lower that of group B, with a significant difference (Z = -2.479, P = 0.013). See **Tables 3** and **4**.

Discussion

In recent years, with the improvement of medical awareness, people realize the importance of postoperative recovery. At present, routine nursing cannot meet the requirements of postoperative rapid rehabilitation. Therefore, clinical medical staff are in urgent need of finding a new nursing method to solve this problem [15-17]. Wilmore et al. first proposed EFTN in 2001, which refers to the optimization of perioperative management through a series of evidence-based medi-

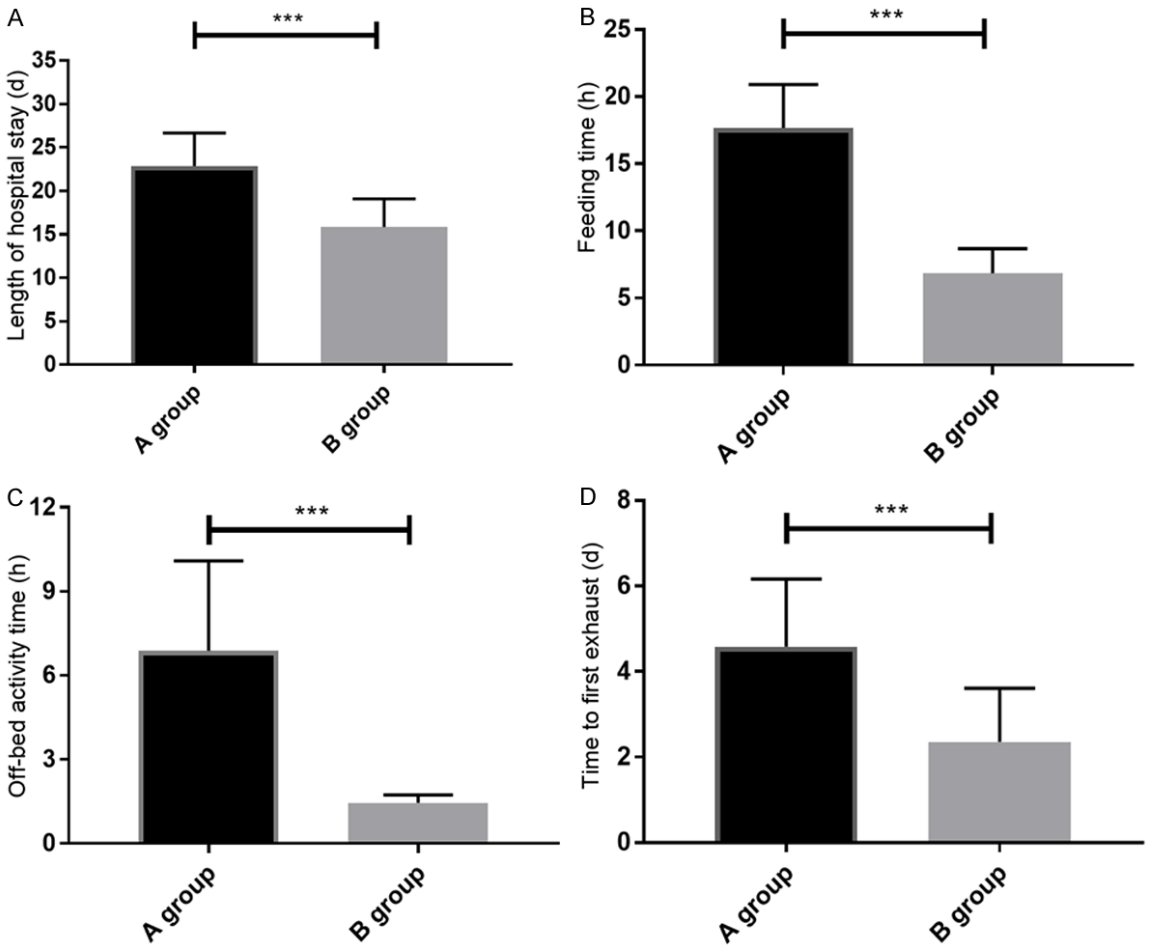

Figure 1. Postoperative recovery. The length of hospital stay, feeding time, out of bed activity time and time to flatulence in group B were shorter than those in group A (A-D respectively). Group A, routine nursing; group B, enhanced fast-track nursing. ***P < 0.001.

Table 3. Total incidence of adverse reaction (n, %)

Group	Group A (n = 45)	Group B (n = 57)	x^2	P
Intestinal obstruction	4 (8.89)	1 (1.75)		
Abdominal distension	10 (22.22)	3 (5.26)		
Nausea and vomiting	3 (6.67)	1 (1.75)		
Fever	1 (2.22)	1 (1.75)		
Infection	1 (2.22)	0		
Anastomotic leak	0	0		
Total incidence	19 (42.22)	6 (10.53)	13.654	0.001

Note: group A, routine nursing; group B, enhanced fast-track nursing.

cal research, so as to reduce the psychological and physiological stress response of patients and achieve rapid recovery [18]. Although EFTN can effectively improve the effect of surgical treatment, there are only a few studies on EFTN in China. Therefore, this study explored the effect of EFTN on the recovery and nursing satisfaction of patients undergoing RTC for BC, in order to provide more evidence for clinical medical staff.

In this study, we firstly compared SAS and SDS between the two groups. SAS is a commonly used clinical tool, which can better reflect the subjective feelings of patients with anxiety and has been widely used in clinical practice. SDS can intuitively reflect the changes of patients' depression during the treatment, but it has certain requirements for patients' education level [19, 20]. The scores of SAS and SDS before nursing in the two group were high, indicating obvious anxiety and depression in the two groups. Those after nursing were clearly reduced in the two groups. The difference values of SDS and SAS between pre-

Table 4. Nursing satisfaction (n, %)

Group	Group A (n = 45)	Group B (n = 57)
Very satisfied	13 (28.89)	25 (43.86)
Satisfied	20 (44.44)	29 (50.88)
Generally satisfied	12 (26.67)	3 (5.26)
Z	-2.479	
P	0.013	

Note: group A, routine nursing; group B, enhanced fast-track nursing.

nursing and post-nursing indicated that those in group B were higher than those in group A, indicating that EFTN can effectively improve patients' adverse emotions like anxiety and depression. This may be because patients in group B cognized the risks of surgery through targeted health education. Thus, the understanding and cooperation of patients and their families were obtained. In addition, psychological nursing is conducted, and any questions raised by patients were explained with patience, so as to dispel patients' doubts and reduce the stress response caused by perioperative anxiety [21]. Huang et al, [22] has found that clinical nursing pathway (CNP) can also improve anxiety and depression in patients with BC; although both of these two methods improve the anxiety and depression of patients, compared with CNP, EFTN is more conducive to the recovery of patients' daily life after surgery with significantly reduced length of hospital stay and fewer complications.

Then, the postoperative recovery profiles of the two groups were compared. The length of hospital stay, feeding time, out of bed activity time and time to first exhaust in group B were shorter than those in group A, indicating that EFTN is helpful for the improvement of postoperative recovery, which is similar to the result of Deng [23]. This is because EFTN provides guidance to patients' nursing in three stages: before, during and after surgery. There were no strict requirements of fasting and drinking prohibition before surgery for patients, which alleviated preoperative hunger and thirst and inhibited postoperative insulin resistance and catabolism [24]. Preoperative enema can clean the intestinal tract, but it is easy to cause intestinal flora disorder and water-electrolyte imbalance. However, preoperative administration of polyethylene glycol electrolytes powder can ensure intestinal cleanness, effectively maintain the stability of intestinal electrolyte, facilitate postoperative recovery, and reduce postoperative complications such as infection and abdominal distension [25]. During the operation, keeping warm and fluid infusion are important means to maintain patients' life activities. Studies have shown that hypothermia can expedite metabolism in patients, and it can even lead to fatal triad (arrhythmia, coagulation dysfunction, and metabolic acidosis) [26, 27]. Moreover, intraoperative warmth can reduce the occurrence of intraoperative bleeding and postoperative complications. A study has shown that excessive intraoperative fluid infusion will lead to an increasing incidence of cardiopulmonary diseases, and lengthen the recovery time of gastrointestinal functions, thus prolonging the length of hospital stay [28]. In this study, the postoperative feeding time of patients was shortened by controlling the amount of fluid infusion, in order to reduce the occurrence of intestinal edema. Early postoperative feeding can promote postoperative flatulence, and reduce nausea and vomiting. Early postoperative activities can strengthen general metabolism, reduce the excitement caused by sympathetic nerve transmission, and accelerate the recovery of gastrointestinal function [29]. Postoperative pain often affects sleep quality. Scientific management of the application of analgesics through VAS can avoid patients' dependence on analgesics, and reduce patients' systemic adverse reactions caused by pain. early postoperative extubation is also beneficial for patients' recovery of systemic functions [30].

It was found that the total incidence of adverse reactions in group B was significantly lower than that in group A, while the nursing satisfaction of group B was higher than that of group A. This showed that EFTN can effectively reduce the occurrence of postoperative complications, thus improving the nursing satisfaction of patients. Cai et al, found that the nursing satisfaction of bladder cancer patients was improved after high quality nursing [31]. In this study, the nursing satisfaction of patients was improved after EFTN. This is because FETN can speed up the postoperative recovery of patients and shorten length of hospital stay, thereby reducing the financial burden of patients' families and improving the quality of life of patients.

There are some limitations in this study. First of all, no long-term or short-term follow-up was conducted for the patients, and it needs to be investigated that whether there was any impact on the survival of patients. Secondly, no randomized controlled clinical trial was performed, and there was bias in the data. Last but not least, EFTN is still in the development stage, and it has not been fully developed even in the United States, Europe and other countries. This results from people's traditional concepts and temporary unacceptance of EFTN. Therefore, the future study should add clinical randomized controlled trial and follow-up of patients, popularize awareness of EFTN and help people accept EFTN, thus providing evidence for this study.

In conclusion, EFTN is worthy of clinical popularization with benefits including promotion of postoperative recovery, improvement of patients' anxiety and depression, reduction of the occurrence of adverse reactions, and improvement of patients' nursing satisfaction.

Disclosure of conflict of interest

None.

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References

[1] Antoni S, Ferlay J, Soerjomataram I, Znaor A, Jemal A and Bray F. Bladder cancer incidence and mortality: a global overview and recent trends. Eur Urol 2016; 71: 96-108.

[2] Siegel RL, Miller KD and Jemal A. Cancer Statistics, 2017. CA Cancer J Clin 2017; 67: 7-30.

[3] Chen WQ, Zheng RS, Baade PD, Zhang SW, Zeng HM, Bray F, Jemal A, Yu XQ and He J. Cancer statistics in China, 2015. CA Cancer J Clin 2016; 66: 115-132.

[4] Robins D, Matulay J, Lipsky M, Meyer A, Ghandour R, DeCastro G, Anderson C, Drake C, Benson M, McKiernan JM. Outcomes following clinical complete response to neoadjuvant chemotherapy for muscle-invasive urothelial carcinoma of the bladder in patients refusing radical cystectomy. Urology 2017; 111: 116-121.

[5] Mani J, Vallo S, Brandt MP, Gust KM, Bartsch C, Daechert J, Tsaur I, Bartsch G and Haferkamp A. What should be the patient's preference regarding the choice of hospital in the case of radical cystectomy? Evaluation of early complications after open radical cystectomy in a medium and high volume setting in one hospital. Patient Prefer Adherence 2016; 10: 2181-2187.

[6] Sharma P, Henriksen CH, Zargar-Shoshtari K, Xin R, Poch MA, Pow-Sang JM, Sexton WJ, Spiess PE and Gilbert SM. Preoperative patient reported mental health is associated with high grade complications after radical cystectomy. J Urol 2016; 195: 47-52.

[7] Park J, Shin DW, Kim TH, Jung SI, Nam JK, Park SC, Hong S, Jung JH, Kim H and Kim WT. Development and validation of the Korean version of the European organization for research and treatment of cancer quality of life questionnaire for patients with non-muscle invasive bladder cancer: EORTC QLQ-NMIBC24. Cancer Res Treat 2018; 50: 40-49.

[8] Kong HY, Yang AL, Ying CY, Kong ZF, Yuan LL, Hu SS and Zhang S. Fast-track surgery in elderly patients undergoing colorectal cancer radical resection. Int J Nurs Sci 2014; 1: 381-384.

[9] Grant MC, Yang D, Wu CL, Makary MA and Wick EC. Impact of enhanced recovery after surgery and fast track surgery pathways on healthcare-associated infections: results from a systematic review and meta-analysis. Ann Surg 2017; 265: 68-79.

[10] Bu J, Li N, Huang X, He S, Wen J and Wu X. Feasibility of fast-track surgery in elderly patients with gastric cancer. J Gastrointest Surg 2015; 19: 1391-1398.

[11] Das-Neves-Pereira JC, Bagan P, Coimbra-Israel AP, Grimaillof-Junior A, Cesar-Lopez G, Milanez-de-Campos JR, Riquet M and Biscegli-Jatene F. Fast-track rehabilitation for lung cancer lobectomy: a five-year experience. Eur J Cardiothorac Surg 2009; 36: 383-392.

[12] Hu JC, Jiang LX, Cai L, Zheng HT, Hu SY, Chen HB, Wu GC, Zhang YF and Lv ZC. Preliminary experience of fast-track surgery combined with laparoscopy-assisted radical distal gastrectomy for gastric cancer. J Gastrointest Surg 2012; 16: 1830-1839.

[13] Torre LA, Bray F, Siegel RL, Ferlay J, Lortet-Tieulent J and Jemal A. Global cancer statistics, 2012. CA Cancer J Clin 2015; 65: 87-108.

[14] Schultz IJ, Witjes JA, Swinkels DW and de Kok JB. Bladder cancer diagnosis and recurrence prognosis: comparison of markers with emphasis on survivin. Clin Chim Acta 2006; 368: 20-32.

[15] Ryndzin A, Rolevich AI, Minich A, Zelenkevich I, Polyakov S, Krasny S, Sukonko O and Rolevich

A. 511 Preoperative systemic inflammation may predict severe complications after radical cystectomy. European Urology Supplements 2016; 15: e511.
[16] Brian JJ, Kevin CL, Richard SM and Shilajit K. The timing and frequency of infectious complications after radical cystectomy: an opportunity for rescue antibiotic treatment. Urology Practice 2018.
[17] Thiele RH, Rea KM, Turrentine FE, Friel CM, Hassinger TE, McMurry TL, Goudreau BJ, Umapathi BA, Kron IL, Sawyer RG and Hedrick TL. Standardization of care: impact of an enhanced recovery protocol on length of stay, complications, and direct costs after colorectal surgery. J Am Coll Surg 2015; 220: 430-443.
[18] Wilmore DW and Kehlet H. Management of patients in fast track surgery. BMJ 2001; 322: 473-476.
[19] Li X, Zhang Y, Gao H, Sun X, Lv W and Xu G. The value of extended nursing services on patients with bladder cancer after endoscopic bladder resection. Iran J Public Health 2016; 45: 48-53.
[20] Li SC and Zhou Y. Influence of individual nursing care on postoperative early recovery and negative emotions in primary liver cancer patients. Int J Clin Exp Med 2018; 11: 4702-4708.
[21] Quirk H, Rosario DJ and Bourke L. Supportive interventions to improve physiological and psychological health outcomes among patients undergoing cystectomy: a systematic review. BMC Urology 2018; 18: 71.
[22] Huang YC. Application and effect evaluation of clinical nursing pathway in bladder cancer patients. Modern Diagnosis & Treatment 2017; 28: 4097-4098.
[23] Deng LQ. Effect of perioperative nursing intervention on rehabilitation of patients undergoing laparoscopic surgery for bladder cancer. Practical Clinical Journal of Integrated Traditional Chinese and Western Medicine 2018; 18: 173-174.
[24] Nygren J, Thorell A and Ljungqvist O. Preoperative oral carbohydrate nutrition: an update. Curr Opin Clin Nutr Metab Care 2001; 4: 255-259.
[25] Cerantola Y, Valerio M, Persson B, Jichlinski P, Ljungqvist O, Hubner M, Kassouf W, Muller S, Baldini G, Carli F, Naesheimh T, Ytrebo L, Revhaug A, Lassen K, Knutsen T, Aarsether E, Wiklund P and Patel HR. Guidelines for perioperative care after radical cystectomy for bladder cancer: enhanced recovery after surgery (ERAS(®)) society recommendations. Clin Nutr 2013; 32: 879-887.
[26] Hsieh TM, Kuo PJ, Hsu SY, Chien PC, Hsieh HY and Hsieh CH. Effect of hypothermia in the emergency department on the outcome of trauma patients: a cross-sectional analysis. Int J Environ Res Public Health 2018.
[27] Moreno DH, Cacione DG and Baptista-Silva JC. Controlled hypotension versus normotensive resuscitation strategy for people with ruptured abdominal aortic aneurysm. Cochrane Database Syst Rev 2018; 6: CD011664.
[28] Pillai P, McEleavy I, Gaughan M, Snowden C, Nesbitt I, Durkan G, Johnson M, Cosgrove J, Thorpe A. A double-blind randomized controlled clinical trial to assess the effect of Doppler optimized intraoperative fluid management on outcome following radical cystectomy. J Urol 2011; 186: 2201-2206.
[29] Zhao T, Huang L, Tian YY, Wang HZ, Wei Q, Li X. Is it necessary to insert nasogastric tube routinely after radical cystectomy with urinary diversion? A meta-analysis. Int J Clin Exp Med 2014; 7: 4627-4634.
[30] Mazul-Sunko B, Gilja I, Jelisavac M, Kozul I, Troha D, Osmancevic N, El-Saleh A, Markic A, Kovacevic M and Bokarica P. Thoracic epidural analgesia for radical cystectomy improves bowel function even in traditional perioperative care: a retrospective study in eighty-five patients. Acta Clin Croat 2014; 53: 319-325.
[31] Cai SP. Effects of high quality nursing for bladder cancer patients after surgery. Contemporary Medical Symposium 2019; 17: 254-255.