



Comparison between radical cystectomy and modified cystectomy in the management of bladder cancer

Thesis submitted

For partial fulfillment of the MD degree in urology

By

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MSc of urology

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Radical cystectomy and bilateral pelvic lymph node dissection for patients with clinical T2-T4a, N0, M0 disease remains the gold standard therapy by which all other treatment modalities should be compared. Radical cystectomy provides excellent local control with pelvic recurrence rates as low as 4% in patients with node negative disease ([Morris et al, 2009](#)).

In an attempt to improve urinary control and preserve sexual function, several additional modifications have been proposed. Experience with nerve-sparing radical retro-pubic prostatectomy has led to the development of a similar procedure for men undergoing Radical Cystectomy with orthotopic neo-bladder with improved urinary continence and potency as reported ([Kessler et al., 2004](#)).

After which various modified cystectomy techniques followed. Spitz et al described a cystectomy with partial prostatectomy while preserving vasa deferentia, seminal vesicles and posterior prostate, ([Spitz et al, J Urol, 1999](#)). Muto et al combined cystectomy with an adenoma enucleation according to Millin ([Muto et al, J Urol 2004](#)) and Colombo et al and Vallancien et al described extirpation of the bladder preceded by transurethral resection (TUR) of prostatic tissue and prostatic urothelium with preservation of the prostatic capsule ([Colombo et al, J Urol, 2004](#)).

Our study aimed to compare between radical cystectomy and modified cystectomy in local recurrence, survival and quality of life in the form of potency and urine continence

We studied 96 patients, dividing them into two groups, one group (51 patients) had undergone standard radical cystectomy and another one (45 patients) had undergone modified cystectomy at the period since January 2013 till January 2017.

Our patients were assessed carefully preoperatively to exclude the possibility of associated prostate cancer. Patients with an abnormal digital rectal examination, high PSA or percent free PSA less than 20% underwent prostatic needle biopsy. No local or distant metastasis after operations on follow-up.

In our study, On the other hand there is statistically significant difference with p-value <0.05 in erectile dysfunction follow up after 3, 6, and 12 months with high percentage of severe erectile dysfunction among standard cystectomy type versus high percentage of no erectile dysfunction among Prostate sparing type of cystectomy. In our study we considered pad test as a measure for continence. there is statistically significant difference with p-value <0.05 between different types of cystectomy as regards continence level follow up after 3, 6, and 12 months with high percentage of incontinence among standardized type versus high percentage of continent day and night among Prostate sparing type of cystectomy.

In our study, there was statistically significant difference with p-value <0.05 as regards occurrence of residual urine that require ISC (intermittent self-catheterization) with **high** percentage of this complication among patients with Prostate sparing cystectomy (35.6%) versus (7.8%) among patients with standardized cystectomy

Conclusion

PSC is more convenient than standard radical cystectomy for highly strict selected patients with bladder cancer as it maintain functional outcome in the form of potency and continence without significant oncological difference and results have been promising, but need to be confirmed after longer follow-up and in larger trials.