

INTRODUCTION

- Estimated 79,000 new cases of bladder cancer and 17,000 attributable deaths in the U.S.^{1,2}
- Recurrence rate after Radical Cystectomy(RC) is 30%^{3,4}.
- 1/3 of patients who undergo RC die from metastatic disease⁵
- Curative therapy is very rare in patients with recurrences⁶
- In esophageal cancer there is data to support a significant difference in recurrence frequency and location pattern after Neoadjuvant Chemotherapy (NAC)⁷
- Two studies investigated the location pattern of Bladder Cancer recurrences after NAC in comparison to RC with contrasting results^{8,9}
- Hypothesis: there will be no difference in the pattern of recurrence in those that have NAC in comparison to RC alone.

METHODS

- Retrospective Analysis of electronic medical record to identify all patients who underwent RC at KUMC between 2008 and 2016
- Comparisons between “NAC”, “Adjuvant” and “RC only” using 2-sample t-tests for interval data and Fisher’s exact test for categorical data

RESULTS

Table 1. The frequency of recurrence location per therapy and its significance

	Neoadjuvant chemotherapy	Adjuvant chemotherapy	RC only	P value
total number of patients with recurrences	55(32%)	7(13%)	78(27%)	0.032
total number of patients with multiple recurrences	1	1	18	0.01
total number of separate recurrences	56	8	107	-
Cystectomy bed	7(12.5%)	0	14(18%)	0.263
Pelvic lymph nodes	5(9%)	0	6(7%)	0.455
Lung	16(29%)	2(29%)	19(24%)	0.238
Liver	3(5%)	1(14%)	10(13%)	0.577
Bone	4(7%)	0	13(17%)	0.172
Extrapelvic lymph node	7(12.5%)	1(14%)	15(19%)	0.582
Peritoneal carcinomatosis	5(9%)	3(42%)	12(15%)	0.588
Urethra	1(2%)	0	11(1%)	1
Upper urinary tract	4(7%)	0	8(10%)	0.595
Other	3(5%)	1(14%)	9(10%)	0.674

SUMMARY

- 172 patients received NAC, 55 had recurrences
- 293 received RC alone, 78 had recurrences
- No significance in the number of patients or total recurrences between the 2 groups.
- The number of patients to experience multiple recurrences was significantly greater in RC only (p value =0.01)

CONCLUSION

- Our data suggested that there is no difference in the recurrence pattern or frequency in those that undergo NAC or “RC only”
- Thus it is likely that there is no significant alteration in physiology of recurrence for those who receive NAC
- No need to alter the imaging guidelines based upon the our findings

WEAKNESSES & FUTURE WORK

- Retrospective analysis inherent bias
- Disproportionate number of patients who received “RC only” had higher mortality after surgery and/or had follow-up at an outside facility
- Future: Identify the earliest recurrence and potential pathways of metastatic spread

Credits/Disclosures/References

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