

# Evaluation of Clinico-Pathological Features of Bladder Tumors

Clinico-  
Pathological  
Features of  
Bladder Tumors

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## ABSTRACT

**Objective:** The main objective of the study is to find clinico pathological features of bladder tumors in local population of Pakistan.

**Study Design:** Descriptive, Cross Sectional Study

**Place and Duration of Study:** This study was conducted at the Department of Urology, University College of Medicine, University of Lahore from 2019 to 2020.

**Materials and Methods:** The data was collected from the OPD of the hospital. After permission from hospital ethical committee, total 120 patients meeting the inclusion and exclusion criteria will be enrolled in the study from Medical Emergency. Detailed history and physical examination will be done to meet the inclusion and exclusion criteria. Informed consent will be obtained.

**Results:** The data was collected from 120 patients. At the point when the complete populace of 180 patients under age 40 is thought of, the dissemination of bladder cancer inside age classes is as per the following: patients under 30 years of age, 4 percent patients; patients between the age of 30 to 39 years, 26 percent patients; patients between the age of 40 to 49 years, 70 percent patients.

**Conclusion:** It is concluded that pathologic discoveries after conclusive extremist cystectomy for urothelial malignancy of the bladder doesn't frequently connect with preoperative arranging. Thusly, the greater part of patients going through cystectomy will be surpassed on their usable pathology.

**Key Words:** Clinico-Pathological Features, Bladder Tumors, Population of Pakistan

**Citation of article:** Ghous MH, Afzal S, Malik SM, Arooj M. Evaluation of Clinico-Pathological Features of Bladder Tumors. Med Forum 2021;32(7):112-114.

## INTRODUCTION

Urinary systems most common malignancy is bladder cancer. Urothelial carcinoma is transcendent type in the United States of America and Europe, where it represents 90% of the bladder tumors. Non-urothelial carcinomas are more common in other parts of the world. Significantly not usually, urothelial tumors can emerge from different locales in the urinary system, including urethra, renal pelvis or ureter<sup>1</sup>.

After prostate disease, bladder malignant growth is the most widely recognized urologic and the fifth most basic generally speaking danger. In 2005, roughly 63 thousand new instances of bladder malignant growth analyzed and more than 13,000 infection related passing in the United States of America<sup>2</sup>.

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Received: March, 2021

Accepted: May, 2021

Printed: July, 2021

Most of new tumors related to bladder are shallow (65 - 70%) and out of those, almost 20% can be relied upon to advance to muscle obtrusive infection. All things considered, a critical amount of muscle-intrusive tumors are analyzed at the beginning show in patients with no earlier account of TCC<sup>3</sup>.

The utmost well-known helpful methodology for obtrusive bladder malignancy is extremist cystectomy. Late upgrades in careful strategy and perioperative administration have diminished complexity rates and usable mortality for this methodology. Notwithstanding the upgrades in careful bleakness, up to half of patients going through cystectomy will encounter nearby or removed repeat. Lamentably, the majority of the patients, which are bound to repeat are not effortlessly recognized by pre-employable assessment<sup>4</sup>. Discoveries like these feature the huge medical under-arranging that happens in patients with bladder disease going through cystectomy. Our powerlessness to tentatively distinguish non-organ-restricted sickness or fundamental micro metastases stays a weakness of current preoperative assessment. Subsequently, numerous patients are surpassed at the hour of careful investigation and extirpation<sup>5</sup>.

Dependable tests accessible for distinguishing bladder malignant growth are none; subsequently the analysis is normally dependent on the clinical indications and signs. Effortless hematuria – tiny or net is the best well-known sign and a hematuria investigation in a generally

asymptomatic patient recognizes bladder neoplasm in generally 25% of gross and 4% of infinitesimal cases<sup>6</sup>. Irritative excretion (recurrence, earnestness, as well as dysuria) is generally attributed to considerable urinary parcel issues however has been related with carcinoma in situ. Different side effects are regularly a sign of further developed illness, for example, flank torment brought about by ureteral block or pelvic torment from extra vesical attack of encompassing designs<sup>7</sup>.

## MATERIALS AND METHODS

This descriptive / cross sectional study was conducted from 2019 to 2020 in the Department of Urology, University College of Medicine, University of Lahore.

**Study Technique:** Non-probability consecutive sampling technique.

**Data Collection:** The data was collected from the OPD of the hospital during 2019 to 2020. After permission from hospital ethical committee, total 120 patients meeting the inclusion and exclusion criteria will be enrolled in the study from Medical Emergency. Detailed history and physical examination will be done to meet the inclusion and exclusion criteria. Informed consent will be obtained. The major problems told at first visit, demographic data, cystoscopic results, clinical follow up information and pathology findings were analysed. The pathological type, clinical group, site of the tumor, staging and size of the tumor were analysed in the cases of rhabdomyosarcoma.

**Statistical Analysis:** SPSS system for the Windows was used to analyse the data. Mean  $\pm$  SD was expressed as continuous variable and frequencies and percentages were expressed as categorical variables.

## RESULTS

The data was collected from 120 patients. At the point when the complete populace of 180 patients under age 40 is thought of, the dissemination of bladder cancer inside age classes is as per the following: patients under 30 years of age, 4 percent patients; patients between the age of 30 to 39 years, 26 percent patients; patients between the age of 40 to 49 years, 70 percent patients. 30 percent of the patients were younger than 40 years. 94 percent of the patients revealed indications on introduction.

The middle time among analysis and cystectomy was essentially unique between the Primary RCx bunch (2 months; 0-6 months) versus the Secondary RCx bunch (22 months; 5 - 149 months). Though maximum of the patients in the Primary RCx bunch were clinical T2 or higher (87%), those patients going through Secondary RCx were less frequently clinical T2 or more prominent (58%). This distinction additionally was heaps of neurotic organizing also.

**Table No.1: Patients' showing signs and symptoms of bladder tumor**

Clinical presentation	Patients
Rectal bleeding	99 (57)
Anemia	19 (11)
Abdominal pain	54 (31)
Bladder pain	7 (4)
Change in bowel habits	37 (21)
Weight loss	20 (11)
Bowel obstruction	16 (9)
Perforation	5 (3)
Perforated diverticulitis	1 (0.6)
Screening	5 (3)
Unknown	7 (4)

**Table No.2: Stages of patients undergoing cystectomy**

Stage	Primary RCx	Secondary RCx	All
<T1	33%	31%	24%
T2	52%	64%	48%
T3	15%	5%	28%

## DISCUSSION

For the people of age 20 years and younger, urinary bladder tumor is very rare. Furthermore, it is hard to analyze such patients as there are numerous restrictions in analytic assessment, for example, tomography imaging or cystoscopy. Consequently, distinguishing the clinical qualities of urinary bladder tumors analyzed at this age is urgent data for the arrangement of patient administration<sup>7</sup>. Various investigations of urinary bladder tumors in patients matured under 40 years have been conducted, however the greater part of these patients were more seasoned than 20 years old<sup>8</sup>. Since all of these investigations showed that there were many differences in the tumor qualities, even in some patients somewhere in the range of twenty and thirty years of age, it is hard to comprehend the attributes of the urinary bladder tumors for the patients under the age of 20 years, in view of such past investigations.

For the patients in this examination, urothelial tumors were for the most part a solitary sore, stalks and papillary shape included. The most well-known indication was the gross hematuria, yet many of the cases were related to an accidental mass. By and large, finding was regularly postponed in light of the fact that it is hard to analyze bladder tumors<sup>9</sup>. Notwithstanding these highlights, bladder tumors are once in a while analyzed as high-grade or obtrusive urothelial carcinoma, in any event, when analyzed in a late stage to give net hematuria; this has prompted the act of not seeking after forceful findings, since these tumors infrequently progress<sup>10</sup>.

At present, the TNM organizing framework, which depends on tumor histological subtype, obsessive tumor stage, lymph hub status and lymph hub status grade, is

the most commonly used preoperative model. It is used to anticipate CSS in bladder cancer patients<sup>11</sup>. The tumor markers that can precisely anticipate the cancer results in bladder cancer patients when used with other neurotic boundaries are fundamental for clinical dynamic. Some distributed investigations on atomic biomarkers, like basal and luminal subtypes, the quality changes atomic framework protein number 22, and the bladder tumor antigen (BTA) detail test<sup>12</sup>.

## CONCLUSION

It is concluded that pathologic discoveries after conclusive extremist cystectomy for urothelial malignancy of the urinary bladder doesn't frequently connect with preoperative arranging. Thusly, the greater part of patients going through cystectomy will be totally upstaged on their functional pathology. An ameliorated comprehension of the general reoccurrence of upstaging in cystectomy patients possibly have significant ramifications for adjuvant and non-adjuvant treatments for these hazardous populaces.

### Author's Contribution:

Concept & Design of Study:	Muhammad Haroon Ghous
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**Conflict of Interest:** The study has no conflict of interest to declare by any author.

## REFERENCES

- Nieder AM, Simon MA, Kim SS, Manoharan M, Soloway MS. Radical cystectomy after bacillus Calmette-Guerin for high-risk Ta, T1, and carcinoma in situ: defining the risk of initial bladder preservation. *Urol* 2006;67:737-41.
- Chang TC, Marcq G, Kiss B, et al. Image-Guided Transurethral Resection of Bladder Tumors - Current Practice and Future Outlooks. *Bladder Cancer* 2017;3(3):149-159.
- Schumacher MC, Holmang S, Davidsson T, et al. Transurethral resection of non-muscle-invasive bladder transitional cell cancers with or without 5-aminolevulinic Acid under visible and fluorescent light: results of a prospective, randomised, multicentre study. *Eur Urol* 2010;57(2):293-299.
- Stanton ML, Xiao L, Czerniak BA, Guo CC. Urothelial tumors of the urinary bladder in young patients: a clinicopathologic study of 59 cases. *Arch Pathol Lab Med* 2013;137(10):1337-1341.
- Wang ZH, Li YY, Hu ZQ, Zhu H, Zhuang QY, Qi Y, et al. Does urothelial cancer of bladder behave differently in young patients? *Chin Med J (Engl)* 2012;125(15):2643-2648.
- Yoon JH, Ahn YH, Chun JI, Park HJ, Park BK. Acute Raoultellaplanticola cystitis in a child with rhabdomyosarcoma of the bladder neck. *Pediatr Int* 2015;57(5):985-987.
- Eble JN, Sauter G, Epstein JI, Sesterhenn IA. World Health Organization Classification of Tumours. Geneva: World Health Organization. Pathology and genetics of tumours of the urinary system and male genital organs; 2004.p. 89-123.
- Fine SW, Humphrey PA, Dehner LP, Amin MB, Epstein JI. Urothelial neoplasms in patients 20 years or younger: a clinicopathological analysis using the world health organization 2004 bladder consensus classification. *J Urol* 2005;174(5):1976-1980.
- Lerena J, Krauel L, García-Aparicio L, Vallasciani S, Suñol M, Rodó J. Transitional cell carcinoma of the bladder in children and adolescents: six-case series and review of the literature. *J Pediatr Urol* 2010;6(5):481-485.
- Seitz G, Dantonello TM, Int-Veen C, Blumenstock G, Godzinski J, Klingebiel T, et al. Treatment efficiency, outcome and surgical treatment problems in patients suffering from localized embryonal bladder/prostate rhabdomyosarcoma: a report from the Cooperative Soft Tissue Sarcoma trial CWS-96. *Pediatr Blood Cancer* 2011;56(5):718-724.
- Sharma P, Zargar-Shoshtari K, Poch MA, Pow-Sang JM, Sexton WJ, Spiess PE, Gilbert SM. Surgical control and margin status after robotic and open cystectomy in high-risk cases: caution or equivalence? *World J Urol* 2017;35(4):657-63.
- Canter D, Guzzo TJ, Resnick MJ, Bergey MR, Sonnad SS, Tomaszewski J, et al. A thorough pelvic lymph node dissection in presence of positive margins associated with better clinical outcomes in radical cystectomy patients. *Urol* 2009;74(1):161-5.