

## Transurethral management of bladder cancer (2003-2008) at Department of urology, Azadi teaching hospital in Kirkuk city, Iraq.

Dr. Muhammad Abdullah Rahman alshwani

M.B.Ch.B. ,F.I.C.M.S.(Urology), Department of Surgery, Medical College – Kirkuk University  
Azadi Teaching Hospital –Kirkuk- Iraq

### Abstract

**Introduction:** Bladder cancer is a malignant tumor that is rising on scale of awareness of both patients and physician. **Aim** of the study: To compare age groups, sex group, grading and staging for the patients with bladder cancer treated with transurethral resection in Azadi general hospital, in Kirkuk city in Iraq. **Material and methods:** Data was obtained from operating protocols, patient's history and ambulance charts of 140 patients in Azadi general hospital in Kirkuk city in Iraq. **Results:** Total of 140 patients were operated at our department in given period of time by means of transurethral resection for bladder cancer. Of those 112 (80%) were males and 28 (20%) female patients. Average age for males were (66,07 years) and for the females were (67.82 years) Most common grade was grade 2 in all patients and also when looked in new cases and in patients taking treatment (received cases). Staging showed that most cases were in Ta group, both new or receive cases. And the most common type of tumor resected was Transitional cell carcinoma. **Discussion and conclusion:** Incidence of bladder cancer is not very high, but it is on constant rise. Bladder cancer is more common in males; Transitional cell carcinoma is more common type of tumor while gradeII and stage Ta are more common findings in our patients.

**Keywords:** transurethral resection, bladder cancer,

### Introduction

Bladder cancer is a malignant tumor that is rising on scale of awareness of both patients and physician (1,2). Bladder cancer is the second most common cancer of the genitourinary tract, more common in male than female, average age at diagnosis is 65

years with approximately 75% of bladder cancers are localized to the bladder at that time and 25% have spread to regional lymph nodes or distant sites (7). Relatively known toxic agents that can cause bladder cancer, together with better understanding of gene aberrations have given us a needed perspective of this problem(3). The exact genetic events leading

to the development of bladder cancer are unknown but they are likely to be multiple and may involve the activation of oncogenes and inactivation or loss of tumor suppressor genes (10) . Symptoms are relatively specific, and what is more important are very obvious, haematuria is the presenting symptom in 85-90% of the patients with bladder cancer gross or microscopic, irritative voiding symptoms seem to be more common in patients with CIS (8). A wide spectrum of treatment options can assure us that every patient will get best and specific care for its disease, modeled by every patient life style and of course a disease itself. Transurethral resection is in use for decades, it hasn't changed much, but our understanding of the transurethral resection has been improving through out the years (4, 5, and 6). It was our attention to collect and analyze data of patients operated in our clinic due to bladder cancer in 5 years period, and to perform a basic epidemiology studies together with a minimum pathomorphological investigations.

### **Materials and methods**

Data was obtained from operating protocols, patient's history and ambulance charts of 140 patients in Azadi teaching hospital in Kirkuk city in Iraq. A set of basic procedures before operation was done to every patient: basic clinical investigation, laboratory findings, U/S and Cystoscopy and TURT done for all. Specimens obtained during operations

were sent to histopathological examination, and same team of pathologist was reviewing all patients, sectioning of all specimens and staining with hematoxylin- eosin stain were done after that diagnosis at the level of cell types in order to differentiate the type of tumor all patient follow a special type of questionnaire and all data obtained were analyzed according to special type of statistical analysis>

### **Results**

Total of 140 patients were operated at our department in given period of time by means of transurethral resection due to bladder cancer. Of those 112 (80%) were males and 28 (20%) female patients. Average age of complete population and by groups is given in table 1.

All patients, underwent transurethral resection of the bladder cancer, they have almost identical average age (66, 6 years). Of all 140 cases of bladder cancer 70 cases (50%) were received (previous treated bladder cancer). Average age of this population was somewhat higher (67 years) than the newly diagnosed cases (66 years, 70 cases).

Transitional cell carcinoma was most common

pathohistological finding (92.8 %), but other carcinomas was found in 7.2 % (Anaplastic carcinoma, metastasis, carcinoma in situ, and papilloma).

Most common grade was grade 2 in all patients and also when looked received.

Staging showed that most cases are in Ta group, either new or received cases.

## **Discussion**

Incidence of bladder cancer is not very high, but it is on constant rise. In 1990 there were 325 new cases of bladder cancer in male patients in Croatia, and three years later 385 cases were diagnosed as well as in United States and other countries especially in Europe there is constant rise in number of cases of Bladder cancer (9). It is known fact that bladder cancer is more common in males and in our population were also 80% males (1, 2, and 3). Average age is as in other reported papers, with slightly older female population, but with almost same age distribution (3). Our population with recurrent disease is older than those newly diagnosed, but this is expected, as recurrence can't come without first diagnosis. We had recurrence in 50% of all treated

patients and the average period for recurrence after TURBT was 20 months in spite of all post operative treatment regimens, and this figure is on upper border of those cited in literature.

Reasons for this could be in operative technique or post operative protocols that are known to be different between hospitals. T stage was not statistically different for recurrent disease when compared to new cases, but there was a significant rise in grade 2 tumors in patients with recurrent disease. In general grading and staging of our patients was not different from reported, with exception the rise in grade 2 in recurrent disease.

Transitional cell carcinoma was found in 92.8 % cases, and other malignant tumor was found in Only 7.2 % of the cases. Some sporadic forms of other cancers were found in resected specimens.

## **Conclusion**

In conclusion Carinoma of the urinary bladder in Kirkuk is more common in male and mostly they were in early stage and with low grade at time of presentation for the newly diagnosed cases and about half of the case showed recurrence after the initial resection in spite of variant post operative treatment regimens.

## References

1. Kwak C, Ku JH, Park Jy, Lee E, Lee Se, Lee C. Initial tumor stage and grade as predictive factor for recurrence. *J Urol*. 2004; 171(1):149-52
2. Wynder EL, Goldsmith K. The epidemiology of bladder cancer. A second look. *Cancer* 1977; 40:1246
3. Lue TF. Urothelial carcinoma In: Tanagho EA, McAninch JW, editors. *Smith's General Urology*. New York: Lange Medical Books/McGraw Hill; 2004. p. 324-345.
4. Phaos CL, Botteman MF, Lasklin BI, Redaelli A. Bladder cancer: epidemiology, diagnosis and management. *Cancer Pract* 2002;10(6): 311-22
5. Soliman As, Levin B, El-Badway S, Nasser SS, raouf AA, Khaled H, El:hattab OH, Chambrelain RM. Planning cancer prevention strategies based on epidemiological characteristics. *Public Health Rev*. 2001;29(1):1-11
6. Vieweg J et al. Impact of primary stage on survival in patients with lymph node positive bladder cancer. *J Urol* 1999;161:72
7. *Smith's general textbook of Urology*, 17<sup>th</sup> edition 2008, p. 308
8. Abenoza P, Manivel C, fraley EE, Primary adenocacinoma of urinary bladdern, *urology* 2008;29:2 .
9. Fairchild WV etal :The incidence of bladder cancer after cyclophosphamide therapy . *J Urolo* 2003;122:163 .
10. Dalbagni G etal : Genetic alterations in tp53 in recurrent urothelial cancer .*Clin Cancer Res* 2001; 7:2797 .

**Table 1.** Average age of operated population

Population	No	Average Age	SD	Min	Max
Complete	140	66,43	10,17	29	92
Male	112 (80%)	66,07	10,27	29	92
Female	28 (20%)	67,82	9,69	38	89

**Table 2. Tumor grading**

Group	Grade		
	1	2	3
All patients	22%	43%	35%
New cases	24%	35%	41%
Received	18%	54%	28%

**Table 3. Types of tumor resected**

Group	Type of tumor	
	Transitional cell carcinoma	Others
All patients	92.8 %	7.2 %

**Table 4. T staging of resected cases**

Group	T Stage				
	a	1	2	3	4
All patients	42%	34%	19%	4%	<1%
New cases	43%	32%	19%	6%	-
Received	41%	36%	19%	2%	2%