250 CASES OF CARCINOMA OF URINARY BLADDER A PRELIMINARY REVIEW

Pages with reference to book, From 102 To 105

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Abstract

A retrospective review of 250 cases of carcinoma of the urinary bladder is presented. The peak age group was 40-60 years and male/female ratio was 14:1. One hundred and sixty seven (89.8%) patients had transitional cell carcinoma and in 42% the lateral wall was the site of tumour. Papillary tumours were seen in 218 (87.2%) cases. Radiotherapy and surgery combined was the most frequent mode of treatment (119 cases: 47.6%). The 5 years survival rate was 17% (JPMA 31:102, 1981).

Introduction

Carcinoma of the urinary bladder remains a problem of considerable importance and its management still poses a challenge in a developing country like Pakistan. Some times the disease is too far advanced when discovered, rendering radical treatment impossible, or radical treatment may be refused by the patient.

Patients and Methods

Two hundred and fifty patients with carcinoma of bladder were admitted to the Urology unit between 1974 and 1979. Carcinoma bladder accounted for 9.8% of the 2553 admissions during this period. Clinical history and physical findings were recorded. Investigations included haemoglobin, total and differential leucocyte count, blood urea, serum electrolytes, excretory urogram, urinalysis and cystoscopy. Biopsy was done in 186 cases whereas endoscopy alone was the basis of diagnosis in 64 cases.

The patients had surgery, radiotherapy and chemotherapy either alone or in combination. Thirty six patients refused treatment.

Results

The age and sex distribution is shown in Table. I.

Table I: Age Groups

Age in Years	*NO. OF PATIENTS*	
	Male	*Female*
10—20	3	—
21—30	9	1
31—40	18	3
41—50	63	9
51—60	79	9
61—70	40	1
71—80	9	2
80+Above	3	1
Total	224 (89.6%)	26 (10.4%)

The peak age group was 40-60 years. The median age of the patients was 53.2 years (Male 53.4 years; Female 51 years) and the range was between 17 and 91 years. The male to female ratio was 14:1.
The commonest presenting symptom was haematuria in 165(66%) cases as is shown in Table II.

Table II: Presenting Symptoms

Symptom	*No. of Cases*	%
Haematuria	165	66.0
Burning Micturition ..	30	12.0
Retention of Urine ..	26	10.4
Frequency	24	9.6
Breathlessness and Pleural Effusion	3	1.2
Hepatomegaly with Ascites	2	0.8

Three patients presented with breath-lessness due. to pulmonary metastases and seven patients had vesical stones.

Duration of symptoms was 0-6 months in 115 (46%) cases. However 135(54%) patients presented between 6 months and over 2 years after the onset of symptoms.

Sixty four (25.6%) patients were diagnosed on endoscopy alone and the remaining 186 on radiological, endoscopic and histological findings.

The tumour was located in the lateral wall of the bladder in 105(42%) patients as shown in Fig. 1.

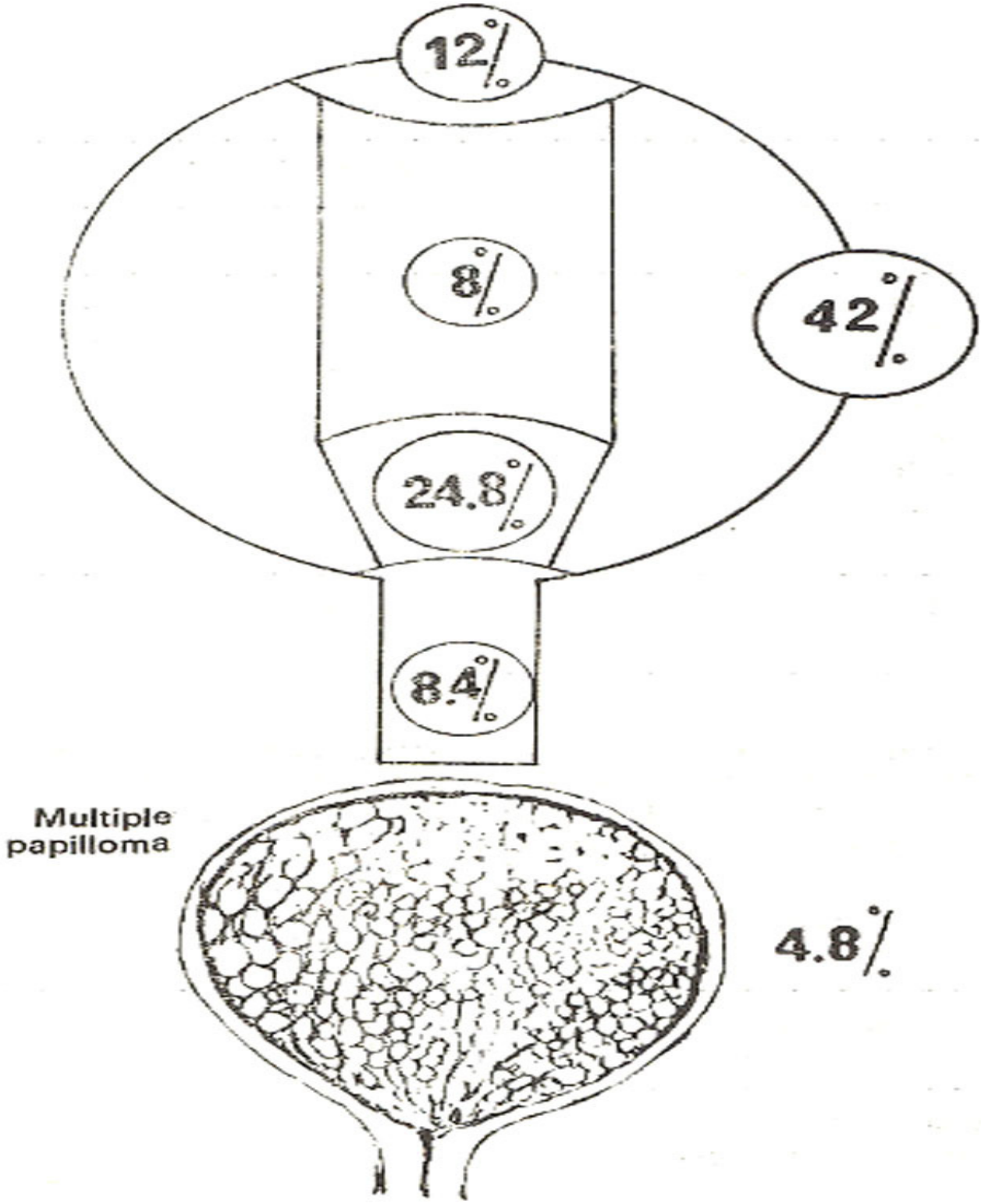

Fig. 1. Location of tumour.

Papillary growth (single or multiple) was seen in 218(87.2%) cases, Ulcer in 21(8.4%) cases and a solid tumour in 11(4.4%) cases as shown in Fig. 2.

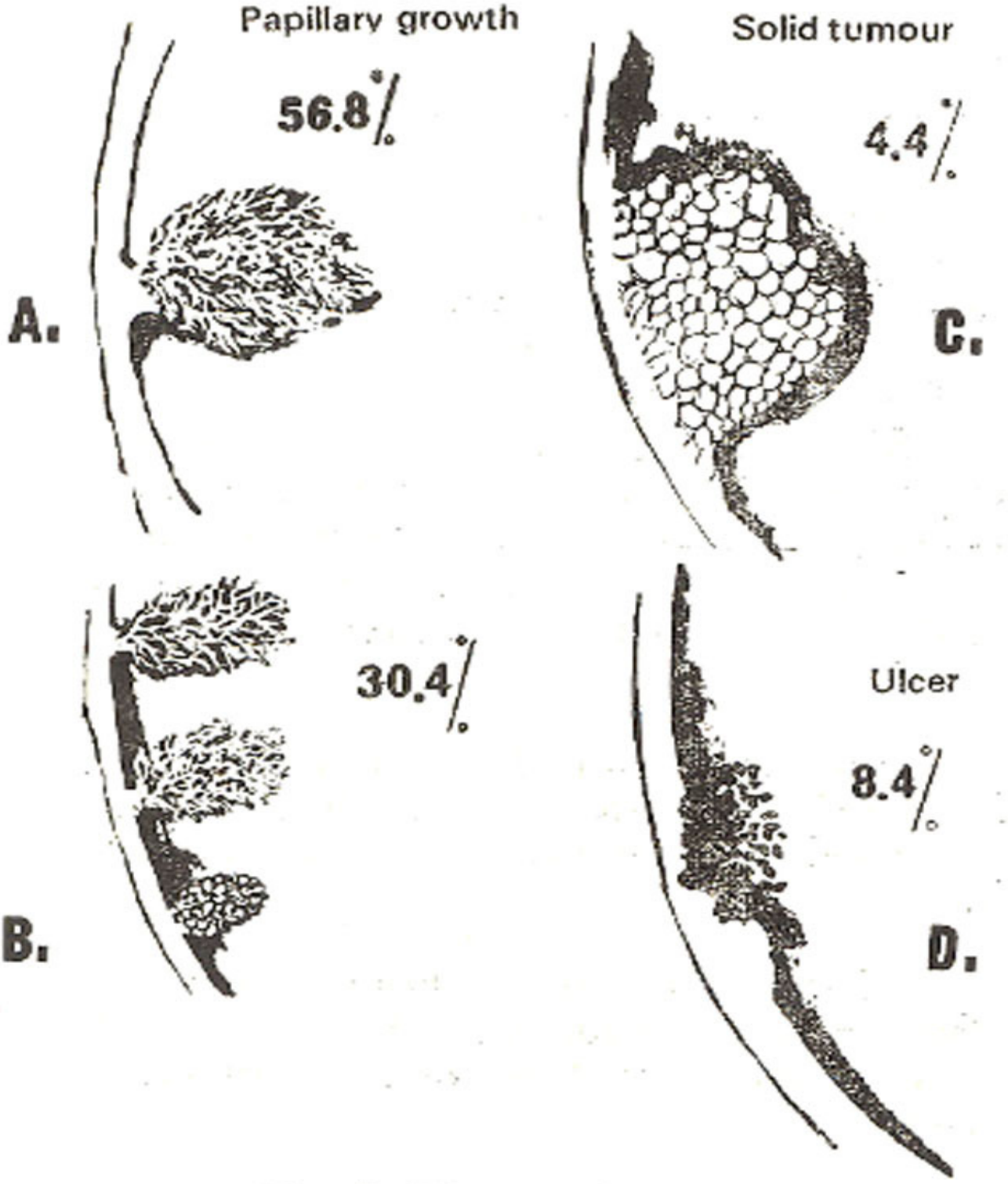

Fig. 2. Types of tumour.

Histological findings are shown in Table III.

Table III: Histological Pattern

Type	*No. of Patients*	%
Transitional Cell	167	89.8
Squamous Cell	9	3.6
Undifferentiated	7	2.8
Adenocarcinoma	3	1.2
	186	100.00
Biopsy not available	64	—
Total	250	100.00

The mode of treatment was surgery, radiotherapy and chemotherapy either alone or in combination as shown in table IV. Thirty six patients refused any form of treatment.

Biopsies were obtained from 186 patients. One hundred and sixty seven were of transitional cell type (89.8%).

Discussion

Geographical variations have been observed in malignant lesions of the urinary bladder.
The average age in this series is 53.2 years with peak age group between 40-60 years which is moderately lower when compared with the series from Western countries. Payne (1959) gave an average age incidence of 63.5 years with only 12% cases under the age of 50 years. Whitmore and Marshall (1962) found the average age in his series to be 58 years. Miller, Mitchell and Brown (1969) reported the maximum incidence in the seventh decade.

Table IV: Treatment

Procedure	*No. of Patients*	%
Radiotherapy+Surgery	119	47.6
Surgery Alone	49	19.6
Surg+Radio+Chemo	20	8.0
Radiotherapy Alone	21	8.4
Chemotherapy Alone	5	2.0
No treatment	36	14.4
Total	250	100.00

Surgical treatment in 188 patients included fulgration, partial cystectomy and total cystectomy with urinary diversion (Table V).

Squamous cell carcinoma associated with bilharzial bladder, however, had a lower average age of 46.3 years (El Bouklany et al., 1972).

Table V: Surgical Procedures in 188 Patients

Types	*No. of Patients*	%
Cystoscopic Fulgration	78	41.5
Open fulgration	55	29.2
Partial Cystectomy	46	24.5
Total Cystectomy with Urinary Diversion	9	4.8
Total	188	100.00

The over all five years survival in this series was 17% as shown in table VI.

Table VI: Computation of Survival Rates for 5 Years

Months of Survival	Alive at Beginning of Interval	Died During Interval	Lost to Follow up During Interval	Withdrawn Alive During Interval	Cumulative proportion Surviving %
0—6	250	34	35	2	86
7—12	179	14	6	2	79
13—18	157	16	3	1	71
19—24	137	19	1	1	61
25—30	116	20	1	1	50
31—36	94	10	1	1	45
37—42	82	16	0	1	36
43—48	65	10	2	0	30
49—54	53	11	0	1	24
55—60	60	11	3	0	17
60+ Above	27	7	0	20	10

The male to female ratio of 14:1 is not usual in other series. Morrison and Cole (1976) found male preponderance in bladder cancer in all nations where studies were undertaken. In the United States the male/female ratio is 2:1 (Gittes, 1979). Payne (1959) records a male preponderance of 4.1:1 and Dodge (1962) found it to be 10:1. Failure of the females to submit to urological examination in this Country may account for this finding.

Only 46 percent of the patients presented within 6 months of onset of symptoms. The majority, over 54%, presented 6 months to 2 years after the symptoms occurred. Massey and associates (1965) found that 60% of the patients consulted physicians within 3 months of onset of symptoms. The unusual delay in presentation appears to be, in part, responsible for the poor survival rate.

This study failed to include the role of exogenous carcinogens including smoking in the etiology of bladder cancer. Future studies should enquire into this aspect of bladder carcinogenesis. Another lacunae in this review is the paucity of accurate staging of the disease. This was partly due to a large number of endoscopies being done under local anaesthesia. General anaesthesia in any country has the connotation of a major procedure and is often avoided by our patients.

Haematuria was the commonest presenting symptoms (66%). This compares favourably with the studies of others where the incidence of haematuria has varied from 66.85% (Ash, 1940; Flocks, 1951; Massey et al., 1965)

Transitional cells carcinoma is the commonest type of tumour (89 8%) which is again similar to other studies. Miller, Mitchell and Brown (1969) found transitional ceil as the commonest malignancy of

bladder averaging 90-95%. Payne (1959*) records 962 cases of bladder tumours of which 92.5% were transitional cell carcinoma.

Delay in diagnosis and patient resistance to radical surgery are two important impediments in the treatment of carcinoma of bladder in this study. Barnes et al (1967) had 63% 5 years survival in stage A, 40% in stage B and 5% in stage C on endoscopic resection. Marshall et al (1956) showed 63% survival in stage A and 22% in stage C employing partial cystectomy. Riches (1960) had 42% survival in stage A, 9% in stage B_2 and only 4% in stage C performing simple cystectomy. Radical cystectomy combined with radiotherapy in a series by Whitmore et al (1977) had 56% survival in stages OAB_1 and only 14% in stage D_1 D_2. By comparision the 5 years survival rate in this series is 17%. However, the selection employed in the series of others and the inherent limitation in diagnosis and treatment, as mentioned earlier, could explain the difference.

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