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Clinical and Pathological Characteristics of Bladder Cancer Patients at Sanglah General Hospital between January 2013 – December 2016

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Abstract: ***Bladder cancer is the second most common malignancy of all genitourinary tumors after prostate cancer and is nearly three times more common in men than in women. Bladder cancer is one of the main problem in urology, in both of diagnosis and treatment due to high incidence, high recurrence rate and difficulities in prognosis of its natural history. The Aim of this studi to describe clinical and pathological characteristic of bladder cancer patients at our institution, Sanglah general hospital. Data were collected From medical record between January 2013 until december 2016 and it was tabulated using descriptive statistics. Total there were 68 patients who diagnosed with bladder cancer, 58 patients was male (85,3%) with mean age was 59,73 y.o (32-76 y.o). Histological type, 59 patients (86.76%) had urothelial carcinoma, 4 patients (5,88%) had squamous cell carcinoma and 5 patients (7.36%) had adenocarcinoma. Treatment choice consist of 15 patients underwent sistemic chemotherapy (22.05%), 15 patients underwent instilation intravesical chemotherapy (22.05%), 24 patients underwent radical cystectomy (35.3%), 3 patient (4,4%) had partial cystectomy combined with chemoterapy and 11 patient (16,2%) has refuse the treatment. Mostly bladder cancer suffered in male patients and the most histological type is Urothelial carcinoma. The most modality treatment choices in our institute is chemotherapy and radical cystectomies with ileal conduit type for urinary diversion.***

Keywords: Bladder cancer, histologic type, urothelial carcinoma, cystectomy

1. Introduction

Urinary bladder cancer is the second most common malignancy of all genitourinary tumors after prostate cancer and is nearly three times more common in men than in women. Bladder cancer is one of the main problem in urology in terms of diagnosis and treatment due to its high incidence, high reccurence rate and difficulties in prognosis of its natural history [1].

The most common clinical sign of bladder cancer is painless gross hematuria, blood in the urine that can be seen by the patient [2,3,4]. Bladder cancer is a disease of older age: cases before the age of 40 are rare and are usually benign in nature. Most cases present after the age of 60 [5,6]. Approximately three-quarters of patients with bladder cancer present with painless, intermittent haematuria [5,7]. It is estimated that approximately 20% of patients being evaluated for gross haematuria will subsequently be diagnosed with bladder cancer [7,8]. One-quarter of patients with bladder cancer will present with irritative voiding symptoms of urgency, frequency and dysuria; symptoms frequently misinterpreted as urinary tract infection but that may signify either trigone involvement with tumour or the presence of Carcinoma in situ [7]. The initial evaluation and management of patients with suspected bladder cancer involves cystoscopic evaluation of the bladder and transurethral resection (TUR) of visible tumour [7].

Ninety-five percent of bladder tumors arise from the bladder lining surface (epithelium). Those that arise from that surface are either papillary (tumors that grow out from the surface) or sessile tumors (which are low and flat). While occasionally a benign tumor can arise in the bladder, the overwhelming majority of bladder tumors are malignant, or cancers. A biopsy can distinguish the benign from the malignant cancers [2,3]. At histology, more than 90% of bladder cancer cases are urothelial carcinoma, approximately 5% squamous cell carcinoma and less than 2% adenocarcinoma [5,6,7].

The aim of this study was to To describe clinical and pathological characteristic of bladder cancer patients at our institution Sanglah general hospital, Denpasar, Bali, Indonesia.

2. Method

We carried out a retrospective study by reviewing medical records from 68 patients who had been diagnosed with bladder cancer form pathological anatomy. From those amount of patient, we describe result of pathological bladder cancer and what treatment that they get in Sanglah general hospital, Denpasar Bali. The data were collected and tabulated by statistic descriptive.

3. Result

Between January 2013 and December 2016, 68 patients had diagnosed with bladder cancer. From total amount 68 patient, there is distribution of gender, 58 patients was male (85,3%) and 10 patients was female (14,7%). Here is the

distribution of age, the youngest is 32 years old and the oldest is 76 yeasrs old, with mean age was 59,73 y.0 (32-76 y.o). From all this patients, they had chief complain that is haematuria, then diagnostic had been perform, such as cystoscopy biopsy. From those number of patient who had diagnosed by pathological anatomy with bladder cancer we also describe histological type, that is 59 patients (86.7%) had urothelial carcinoma, 4 patients (5,8%) patients had squamous cell carcinoma and 5 patients (7.35%) patients had adenocarcinoma. In Sanglah general hospital, Denpasar Bali there are some modality of treatment such as sistemic chemotherapy, intavesica chemotherapy, combine chemotherapy and partial cystectomies and radical cystectomies, depend on staging and patient choice. From 68 patient, 15 patients underwent sistemic chemotherapy (22.05%), 15 patients underwent instilation intravesical treatment (22.05%), 24 patients underwent radical cystectomy (35.3%), 3 patient has (4,41%) had partial cystectomy combined with chemoterapy and 11 patient (16,17%) refuse the treatment (Tabel 1).

Table 1: Clinical and pathological characteristic Of Bladder Cancer Patients At Sanglah General Hospital Between January 2013 – December 2016

Variables	*Result*
Sex (%)	
Male	58 (85.3%)
Female	10 (14,7%)
Mean age (range)	±59,73 y.o (32–76 y.o)
Chief complain	Hematuria (100%)
Histopathological type	
TCC	59 (86,76%)
SCC	4 (5,88%)
Adenocarcinoma	5 (7,36%)
Grading	
Low grade	15 (22.05%)
Moderate grade	4 (5.8%)
High grade	47 (69.15%)
Unknown	2 (3%)
Treatment (%)	
Systemic Chemotherapy	15 (22,05%)
Instilation intravesical treatment	15 (22,05%)
Radical cystectomy	24 (35,3%)
Partial cystectomy (Combined)	3 (4,4%)
Refused treatment	11(16.2)

TCC: urothelial carcinoma;SCC: squamous cell carcinoma

4. DISCUSSION

In our study with four years observation from january 2013 until december 2016, there is 68 cases pastients with bladder carcinoma, incidence in man higher than women that is 58,3%. (Ratio M:F = 5,8:1). From other study urinary bladder cancer is also commonly seen in males than in females (M: F = 3:1)[8.9]. Furthermore, studies done in Malaysia and India revealed higher M:F ratio of 9.4:1 and 8.6:1 respectively which shows male preponderance. This shows that as similar to other part of the world, in Nepal also, incidence of Ca bladder is high in male than in female. The reason for higher incidence in males could be attributed to environmental, dietary exposure, anatomical difference, urinary habits and hormonal factors whereas, less incidence of bladder cancer in females could be due to less exposure of females to individual carcinogen and less smoking [9-13].

The most common clinical manifestation was found to be a painless intermittent gross or microscopic hematuria and some patients with diffuse carcinoma in situ (CIS) can be presented with irritative voiding symptoms [11,14]. In the present study, hematuria was found to be the most common clinical feature, in this study all patients came with chief complain that is haematuria 100%. In support to the present finding, a study done in India and Pakistan has shown that 97% , 81.4% , 88.7% of the patients were having hematuria as presenting symptoms [10-13,15].

Bladder cancer is a common malignancy often diagnosed in older adults. The median age at diagnosis in a study was reported to be 69 years for men and 71 years for women [16]. Another research showed 58.4% of the patients with bladder cancer were older than 50 years of age [17]. Another study showed that 94.4% of the patients presented with bladder cancer were older than 40 years. The largest proportion of patients (39.8%) with bladder cancer in a study were older than 70 years [18]. In our study average age was 59,73 years between 32-76 years old. Study done in India Malaysia and Pakistan show an average age distribution of 60, 65 and 58 years old respectively [10].

Trantitional cell carcinoma was the most common variant accounting for 90% of bladder cancer reported in the literature [19]. Squamous cell carcinoma accounts for only 1% of bladder cancers in England, 3%-7% in the United States and as much as 75% in Egypt [16]. In a study, 97.7% of the patients with bladder cancer had TCC, whereas SCC and adenocarcinoma accounted for 1.04% and 1.25% of the patients, respectively [11]. Frequency of different bladder cancers in a study from Iran was reported with TCC as the most common (95.7%), followed by adenocarcinoma (1.1%) and SCC (0.5%) [18]. Respectively. In our study,frequency of TCC, SCC and adenocarcinoma was 86.7% , 5,8% and 7.35%.

Respectively. In a study, 44% cases with bladder cancer were Grade II and 29.5% Grade III. Out of 148 patients with noninvasive papillary carcinoma of bladder, 84.5% were high grade (grade III or IV) and 15.5% were low grade (grade I or II) [19]. In our study, Low grade had been found in 22.053%, moderate 5.8% and high grade in 69.11%.

Treatment of bladder cancer depending on the stage and other factors, treatment options can include: Surgery, Intravesical therapy, systemic chemotherapy, radiation therapy, Immunotherapy. Sometimes, the best option might include more than one of type of treatment. Surgery, alone or with other treatments, is part of the treatment for most bladder cancers. Surgery can often remove early-stage bladder tumors. But a major concern in people with early-stage bladder cancer is that new cancers often form in other parts of the bladder over time. Removing the entire bladder (known as a radical cystectomy) is one way to avoid this, but it can have major side effects. If the entire bladder is not removed, other treatments may be given to try to reduce the risk of new cancers [2,3].

In our institute there are some modality of treatment such as sistemic chemotherapy, intavesica chemotherapy, combine chemotherapy and partial cystectomies and radical cystectomies, depend on staging and patient choice. From 68 patient, 15 patients underwent sistemic chemotherapy (22.05%), 15 patients underwent instilation intravesical treatment (22.05%), 24 patients underwent radical cystectomy (35.3%), 3 patient has (4,41%) had partial cystectomy combined with chemoterapy and 11 patient (16, 17%) refuse the treatment.

5. Conclusion

The results confirmed that bladder cancer occurs most commonly in the elderly with male predominance and TCC is the most variety histological of bladder cancer . Hematuria was the most common complaint of patients with bladder cancer; as a result physicians should be alert to refer patients with this symptom for further evaluation particularly in elderly and still to be our job to give more education and information about cancer issue, to raise awareness and to reduce morbidity, and gained better quality of life for cancer patients.

6. Conflict of Interest

The author declare that they have no financial or nonfinancial conflicts of interest related to the subject matter or materials discussed in the manuscript.

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