

Histopathological Study of Lesions In Urinary Bladder – A 2 Year Retrospective Study

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ABSTRACT

AIM – to study the histopathological spectrum of various lesions in urinary bladder

Background – Bladder is vulnerable to various non neoplastic and neoplastic lesions. Cystitis constitutes the most common non neoplastic lesion and urothelial carcinoma being the commonest tumor of bladder.

Bladder tumor is the 7th most common tumor worldwide. Only few studies have been done on lesions of bladder in the population of northern India.

Material and Methods – from July 2016-june 2018 records of patients undergone cystoscopic biopsies were evaluated. A total of 200 patients were identified.

Results – 200 bladder biopsies were analyzed and male predominance was seen. The most common age group was 61-70 years. Among neoplastic lesions, high grade urothelial carcinoma accounts for 61.7% cases whereas cystitis was the most common non neoplastic lesion 96.6%.

Keywords: NIL

INTRODUCTION

Urinary bladder is prone to various neoplastic and non neoplastic lesions. Cystitis, Malakoplakia, Tuberculosis, Urachal lesions etc are common non neoplastic lesions¹.

Urothelial cancer constitutes for 90% of primary bladder tumor. It accounts for 3.9% of all cancer cases and is the 9th most common cancer, as per Indian cancer registry data in men².

Risk factors include smoking, long use of analgesics, few anti cancer drugs and artificial sweeteners.

Unlike Transitional Urothelial carcinoma, risk factor for squamous cell carcinoma is exposure to infectious agents. Schistosoma Haematobium is the main cause of squamous cell carcinoma in developing countries³.

Overall developed countries have 6 times higher prevalence than developing countries⁴ with male predominance and peak age of 50-80 years⁵.

Prognosis and survival depends on age, gender, racial factors, grade and muscle invasion. Thus, in cystoscopic biopsies where muscle tissue is not included, it is difficult for the pathologist to give definitive conclusion about the tumor extension.

To our knowledge, there are only few studies on lesions in urinary bladder in the population of northern India. Here we present a 2 year retrospective study of lesions in urinary bladder.

MATERIAL AND METHODS

The study was carried out in Acharaya Shri Chander College of Medical Sciences and Hospital, department of pathology.

Data was collected from all the patients undergone TURBT biopsies entered in the hospital information system from July 2016-June 2018. Proper ethical clearance and relevant information was taken.

Patients with incomplete history and in those patients where there was failure to retrieve histology slides and blocks were excluded.

All the tissue blocks were retrieved and paraffin sections were cut and were stained with Haematoxylin and Eosin and then mounted in Distyreneplasticiser Xylene.

Then microscopic analysis was carried out under light microscopy and lesions were studied according to WHO classification of tumors of Urothelial Tract 2016.

AIM

To study the histopathological spectrum of various lesions in urinary bladder

RESULTS

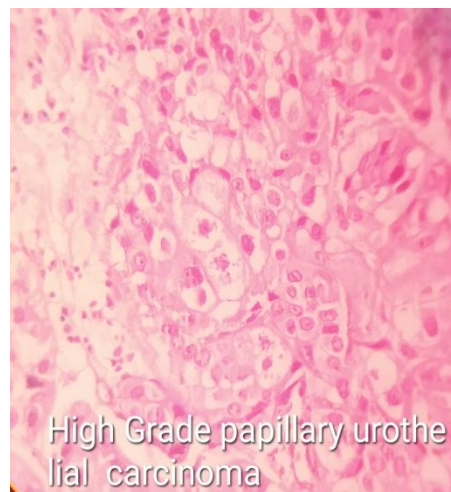
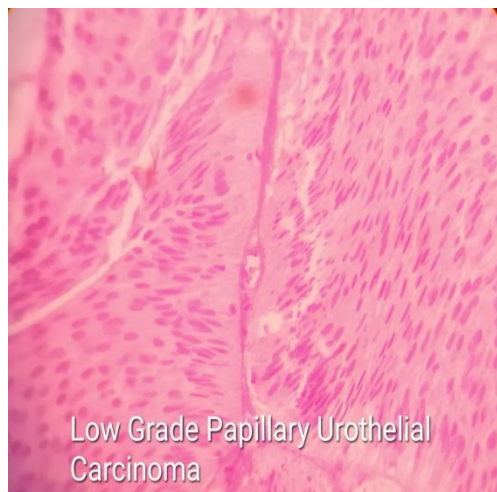
In our study 200 bladder biopsies were analysed. Among these study population, 132(66%) were males

while 68(34%) were females with male to female ratio of being 1.9:1.

Age range was 35-90 years and peak incidence was seen in 61-70 years.

Also, out of 200 cases, 59(29.5%) were non neoplastic and 141(70.5%) were neoplastic. Among non neoplastic lesions, most cases were of Cystitis that is 57 cases(96.6%) and remaining 2 cases were of mild non specific inflammation due to trauma.

Out of 141 neoplastic lesions, 87 cases(61.7%) were of high grade Urothelial carcinoma, among them 50 cases(57.4%) presented with muscle invasion. Also, 48(34.04%) out of 141 cases were of low grade Urothelial Carcinoma and two were Squamous Cell Carcinoma(1.4%) and remaining 4 were diagnosed as Papillary Urothelial Neoplasm of Low Malignant Potential.



Age distribution table

Range	No. of Cases
<38	01
39-50	13
49-60	60
58-70	78
69-80	47
>81	01

DISCUSSION

Our study revealed a wide spectrum of non neoplastic and neoplastic lesions of urinary bladder. The commonest neoplastic lesion was transitional cell carcinoma.

In 2003, bladder cancer was the 6th most common cancer according to Delhi Cancer Registry and 7th most common worldwide⁶.

In this study we observe that there is increased prevalence in males as compared to females, this can be due to difference in occupational exposure and smoking habits⁷. Active smokers have higher incidence of bladder cancer than former cigarette smokers⁸.

Most of the bladder cancer presents with painless hematuria in 80-85% of patients⁹.

In the present study we found that majority of malignant tumors were invasive with muscle invasion seen in 57.4% cases.

CONCLUSION

Our study has revealed that amongst bladder biopsies received, bladder tumor is the commonest lesions seen and papillary Urothelial Neoplasm is the most common type. Also, more than 50% of high grade tumor presented with muscle invasion which is a valuable prognostic predictor of survival.

Thus, the importance of inclusion of muscle in cystoscopic biopsies is necessary.

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