

A study on the Incidence of Transitional Cell Carcinoma with respect to Blood Group in west Bengal

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Abstract: A prospective study conducted in SSKM hospital over a period of 4 year in the urology department. The incidence of transitional cell carcinoma noted by various method. Also the blood group was noted. A comparison was made. It had been found that transitional cell carcinoma is more common in B positive blood group patient.

Key word: Transitional cell carcinoma, bladder, blood group.

I. Introduction

Urinary bladder is a hollow viscous which act as a reservoir of urine with an average capacity 120-320ml[1]. Bladder cancer is any of several type of cancer arising from the epithelial lining of urinary bladder. The most common type of bladder cancer is transitional cell carcinoma. Five years survival rate in US are around 77%[2]. It is the ninth leading cause of cancer with 43000 new cases[3] and 165000 death occurred in 2012 [4]. It usually present with painless haematuria. It occurs in 80-90% patient. Like carcinoma stomach bladder cancer also have an increased rate of occurrence in a particular blood group patient. Tobacco smoking is the main cause of bladder cancer. Smoking is associated with over half of bladder cancer cases in male and one third cases in women[5]. There is linear relationship between smoking and risk factor quieting smoking reduces the risk[6]. Passive smoking has not been proven to be involved[7]. Thirty percent of bladder cancer is associated with occupational exposures e.g. 2-naphtholamide. Occupations at risk are bus driver, rubber worker, motor-mechanics[8]. Here we tried to find out the incidence of bladder cancer in any specific blood group in the people of west Bengal.

II. Materials And Methods

The study was a prospective study conducted over a period of 4 years in SSKM hospital those who are attending OPD clinic. All the patients of West Bengal was selected in this study and bio-data collected from urology ward and B A HT file. The most important part was history taking thoroughly. The following parameters are recorded for this study eg Age, sex, drinking water habit, blood group, occupation, histopathological report etc. Preliminary cases were urine for routine examination, Ultrasonography, CT scan of lower abdomen, intravenous urography. The disease confirmation was done by histopathological examination. Only transitional cell carcinomas were concerned. Routine urine examination showed plenty of RBC, microscopic examination shows a large no of malignant cell. Abdominal USG shows echogenic foci projecting into the bladder lumen. , intravenous urography revealed pedunculated radiolucent feeling defect projecting into the lumen. CT scan showed invasion of bladder wall and surrounding tissue. Confirmation was made on HPE after transurethral dissection of bladder mass.

III. Observation And Result

In this study 350 patients are selected. Among them we got male: female=23:1. It is more common in 50-60 years of age group. It is also common amongst the government service holder, more common in Kolkata than any other districts also common in those who drink tube-well water. Disease confirmation was done by histopathological examination. Which reveals that transitional cell carcinoma of bladder is common in B+ blood group.

IV. Discussion

Bladder carcinoma is very much challenging for the patients, doctor as well as the institution where the diagnosis treatment and follow up are conducted. Now-a-days it is more or less within the domain of super

speciality surgery-urology. We conducted the study in the institute of post graduate medical education and research and Seth Sukhlal Karnani Memorial Hospital(SSKMHospital). It is an apex institution and has got well equipped facilities in urology. Most of the bladder cancer patients were referred from various hospitals and institute of different districts of west Bengal from proper management. It has been known that a person having a particular blood group has got some genetic association for the development of a particular organic cancer e.g. Gastric carcinoma in blood group A patient [9]. In this study we tried to find out the incidence of blood group in specific blood group. We found most of the patient had blood group B+ and second most common was O+. Negative blood group patient were rare. Worldwide male:female =3:1[10] but we got male: female=23:1. Transitional cell carcinoma of bladder is rare in patient younger than 30yrs. According to a report two cases of bladder cancer were found under the age of 30years[11]. A retrospective study correlating the blood group of 141 patients with bladder cancer showed that patient with blood group A had lower grade tumour with lower mortality rate and those with blood group O had higher grade of tumour with higher mortality rate[12].

V. Conclusion

In our study we have found that urinary bladder carcinoma is more common among the patient with B+ and O+ blood group in Bengali speaking patient of West Bengal. Among them B+ patients are more.

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