ORIGINAL RESEARCH PAPER

Pathology

HISTOPATHOLOGICAL SPECTRUM OF NEOPLASTIC LESIONS OF PROSTATE IN A TERTIARY CARE CENTRE : A 6 MONTH RETROSPECTIVE STUDY

KEY WORDS: Prostate, Histopathology, Benign Prostatic Hypertrophy, Adenocarcinoma .

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ABSTRACT

Introduction: Prostate is an essential organ of the male reproductive system. With increasing age, prostate lesions increases , which requires to be examined histopathologically to decide its exact nature

Material and Methods: The present retrospective study was carried out for the duration of 6 months (from 01st Sept 2017 to 31st March 2018) at Histopathology section ,Department of Pathology , Shyam Shah Medical College and Associated Hospitals , Rewa (M.P). All relevant data regarding the histopathological examination were rechecked along with their slides. Slides were stained with Haematoxylin and Eosin stains and morphological pattern of each case were classified into a wide spectrum from specific benign to malignant lesions.

Result: In present 6 month retrospective study 52 specimens with prostate lesions were studied of age group range from 40years to 90 years. Maximum cases were of age group 61-70 yrs (n= 21). Of the 52 cases , 02 cases(3.9%) were malig nant and rest were benign. Most of the cases were Benign Prostatic Hyperplasia (BPH) which came out to be 84.6% of the total.

Conclusion: We hereby conclude from the present study that histopathological examination is mandatory for every resected prostate specimen as to decide their exact nature. We also conclude that the tendency for malignant transformation is directly proportional to age.

INTRODUCTION

Prostate is essential organ of the male reproductive system composed of glandular and stromal components and its secretions forming about 30-50 % of the seminal fluid volume.[1] With increasing life expectancy, increasing awareness and better health services lesions of prostate has become a common specimen received as biopsy for histological diagnosis which can be benign on one end and malignant lesions on the other . The problem lies in the fact that malignant and benign lesions of prostate may have a very similar presentation but their management and prognosis is quite different, so the histopathological diagnosis plays important role in this condition. Histo-pathological grading of the prostate is one of the most important prognostic indicator of Ca. prostate. There are many studies related to the histo-pathological assessment of the prostate lesions , our study aims to assess the spectrum of these lesion in our tertiary care center which harbors large population of vindhya region .

MATERIAL METHODS:

The present retrospective study was carried out for the duration of 6 months (from 01st Sept 2017 to 31st March 2018) at Histopathology section ,Department of Pathology , Shyam Shah Medical College and Associated Hospitals , Rewa (M.P.) a tertiary care center of Vindhya Region of Central India . Specimens (Prostatectomy & TURP) received from the department of Surgery , SGMH Rewa for histo-pathological examination in the duration of study were analyzed retrospectively . All relevant data regarding the histopathological examination were rechecked along with their slides. Slides were stained with Haematoxylin and Eosin stains and morphological pattern of each case were classified into a wide spectrum from specific benign to malignant lesions. Cases were also analyzed with respect to age of the patient and clinical presentations. Malignant lesions were classified according to latest Gleason's scoring system. Samples with normal histology, improper labeling, without relevant history were excluded from the study.

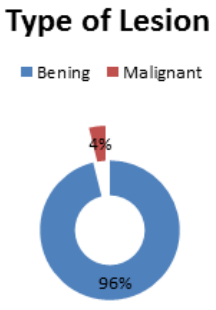
RESULT:

In present 6 month retrospective study 52 specimens with prostate lesions were studied of wide range of age group from 40years to 90 years. Maximum cases were of age group 61-70 yrs (n= 21, 40.4%) followed by age group 71-80 [Table 1].

S. No.	Age group	Number of cases (N)	Percentage (%)
01	41-50	02	3.8
02	51-60	11	21.5
03	61-70	21	40.4
04	71-80	18	34.6
05	81-90	Nil	Nil

Out of 52 cases studied, 50 cases were benign (96.1%) and 02 cases being malignant (3.9%).

[Chart-1]



Most common histopathological finding were Benign Prostatic Hyperplasia (n=44, 84.6%), followed by Atrophy (n=3, 5.8%) [Table-2]

S.No	Histopathological diagnosis	Number of cases(n)	Percentage (%)
01	Benign Prostatic Hyperplasia	44	84.6
02	Basal cell Hyperplasia	01	1.9
03	Atypical Adenomatous Hyperplasia	01	1.9
04	Atrophy	03	5.9
05	Prostatic Intraepithelial Neoplasia	01	1.9
06	Prostatic Adenocarcinoma	02	3.8

DISCUSSION:

Akin to the similar studies like Mathi A et al [2] and Puttaswamy K et al [3] , present study also shows that the most of the specimen received for histopathological examination are of age group 61-70 yrs. Similar to the present study, studies of Arya RC et al [4] and Kumar M et al [5] , our study also revealed that most common lesion in the prostate specimen sent for HPE is Benign Prostatic Hyperplasia. Likewise, previous studies of Kasliwal N et al [6] and Deshmukh BD et al [7] , present study also shows that Ca. Prostate is most prevalent in age group 71-80 yrs. The decline in the number of cases beyond the age of 80 years reflects the average life span of people in our country.

CONCLUSION:

We hereby conclude from the present study that histo-pathological examination is mandatory for every resected prostatic specimen as to decide their exact nature. We also conclude that the tendency for malignant transformation is directly proportional to age.

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