**Original Research Paper**

**Pathology**

**HISTOPATHOLOGICAL SPECTRUM OF PROSTATIC LESION: A HOSPITAL BASED STUDY**

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**ABSTRACT**

**Introduction**

Prostate gland is an exocrine gland and the largest accessory reproductive organ in male. It is the most commonly affected organs in males with increasing age, accounting for significant morbidity and mortality. The most important categories of prostatic diseases are inflammatory lesions, Nodular hyperplasia and Carcinoma. Transurethral resection of prostate is a common urological procedure primarily used for the surgical management of benign prostatic hyperplasia (BPH). Prostate cancer is the most common cancer and the second most common cause of cancer related death in men. It is the most common lesion which may be difficult or impossible and definite diagnosis requires microscopic examination.

**Aim**

To study the histopathological spectrum of Prostatic lesion in TURP specimens received in our department.

**Material and Method**

It was a 1-year study done retrospectively from May 2016 to April 2017. It was conducted in histopathology section of pathology department of GMC Jammu. Retrospective analysis of all TURP specimens received in the department was done. All histopathological data pertaining to TURP specimen received in the histopathology section were retrieved and reviewed. History slides of all cases were reviewed. Staining was done by Haematoxylin and Eosin stains. Each case was analysed with respect to age, clinical presentation and microscopic diagnosis. Prostatic carcinomas were classified using Gleason's score. Prostatectomy specimen and prostatic biopsies were excluded from our study.

**Result**

During one year 96 TURP specimens were received in our department. It makes 3% of all the specimens (3000) received in surgical sections. Age of patients ranged from 40 years to 90 years with a mean age of 54 years. Maximum cases were seen after 60 years of age. Most of the TURP specimen were observed from patients in age group of 61-70 years followed by 71-80 years. The most common age group presenting with benign prostate hyperplasia were 61-70 years. Prostatic cancer was most commonly seen in 7th decade.

Out of 96 cases 89 (92.7%) were benign cases whereas 7 cases (7.3%) were found to be malignant.

Benign hyperplasia of prostate (BPH) was the most common histological diagnosis (50 cases). It was followed by case of BPH with chronic prostitis (36 cases) and 3 cases of BPH with basal cell hyperplasia among the benign lesions. Most common clinical presentation was increase in frequency of micturation.

**Conclusion**

Benign lesions were more common than malignant lesions. Maximum patients who were affected were in 6th decade presenting with increased frequency of micturation.

**Discussion**

Most common clinical presentation was increase in frequency of micturation (70%) followed by difficulty in voiding of urine (46%), acute retention (20%) and dysuria (16%).

**KEYWORDS**

Prostate gland, benign prostatic hyperplasia, BPH, prostate cancer, prostatic carcinomas, Gleason's score.
Prostatic carcinoma was diagnosed in 7 cases. All were histologically adenocarcinoma. These cases were previously not suspected of malignancy and were detected incidentally on TURP specimen. 5 cases were poorly differentiated with gleason score of more than 8 while 2 cases were moderately differentiated with a score of less than 6. All the cases were above and equal to 60 years of age.

Most common clinical presentation was increase in frequency of micturation (70%) followed by difficulty in voiding of urine (46%), acute retention (20%) and dysuria (16%). Similar to that seen in study done by Anushree CN et al (13). However Puttaswamy K et al (5) found hesitancy to be the most common symptom seen in 51.6% cases in his study.

**Conclusion**- Benign lesions were more common than malignant lesions. Maximum patients who were affected were in 6th decade presenting with increased frequency of micturation. Histological study of TURP specimen is mandatory so as not to miss a malignancy.

**Table 1** Distribution of prostatic lesion

<table>
<thead>
<tr>
<th>Lesion</th>
<th>No. of cases (n = 96)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Neoplastic</td>
<td>89</td>
<td>92.7%</td>
</tr>
<tr>
<td>Neoplastic Lesion</td>
<td>7</td>
<td>7.3%</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 2** Age wise distribution of the lesion.

<table>
<thead>
<tr>
<th>Age</th>
<th>Nodular hyperplasia</th>
<th>Nodular hyperplasia with chronic prostatitis</th>
<th>Nodular hyperplasia with basal cell hyperplasia</th>
<th>Prostatic carcinoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-40</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>41-50</td>
<td>-</td>
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<td>-</td>
</tr>
<tr>
<td>51-60</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>61-70</td>
<td>30</td>
<td>21</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>71-80</td>
<td>30</td>
<td>15</td>
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<td>4</td>
</tr>
<tr>
<td>&gt;81</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>36</td>
<td>3</td>
<td>7</td>
</tr>
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**References**