

**Original Article**

## **Frequency of Malignancy in Benign enlarge prostate at Peoples Medical College Hospital Nawabshah**

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### **ABSTRACT**

**Aim of Study:** To determine the frequency of Malignancy in Benign enlarge prostate.

**Study Design:** Prospective observational study:

**Place and Duration:** Two years study from October 2008 to October 2010.

Was conducted in Peoples Medical College Nawabshah.

**Patients and methods:** The study comprises 50 patients all were admitted from OPD (Out Patients Department). The patients were evaluated fully after history, clinical examination DRE and specific investigation of PSA X-ray Lumbo sacral spine Trans rectal, Endo luminal ultra sound flow metery Trans rectal biopsy C.T scan and Bone scan and General assessment. All Patients with enlarged prostate included out of 50 patients 48 patients under went surgery and tissue sent for histopathology.

**Result:** In this study of 50 patients of enlarge prostate total number of patients were in age group 55 to 75 years, Out of 50 patients 9 patients suspected malignant on the basis of DRE. But PSA will raise in 7 patients. Regarding the histopathology the results 7 patients showed malignancy adeno carcinoma.

**Conclusion:** Prostate carcinoma more common enlarged prostate as compared to fibro tic prostate.

**Key words:** Enlarged prostate carcinoma prostate, adeno carcinoma of prostate.

### **INTRODUCTION**

Carcinoma of prostate constitutes a major health problem. It is the most common malignant tumor in men over the age of 65 years. It is estimated that lifetime risk of Western men having Carcinoma of prostate is about 30%. Approximately 50% of patients with metastasis disease dies within 2 years. 5 years survival rate is less than 15%.

Virtually all cancers are adeno carcinoma with the grade being indicated by the Gleason score.

Mostly patients present with obstructive symptoms as retention of urine, poor stream and irritative symptoms as frequency, urgency and incontinence. So, diagnostic techniques used in carcinoma of prostate have been evolved greatly with technological developments, but the classical digital rectal examination (DRE) is still the mainstay for the diagnosis of any prostates disease. The diagnosis has been based primarily on the ability of the index figure of surgeon to detect mobility, asymmetry of the gland and hardness in the gland. The accuracy

rate of digital rectal examination (DRE) in detecting malignancy is 20-40% in different size.

Investigations such as tumor marker, serum Prostate Specific Antigen (PSA) level, and biopsy via trans rectal ultra sound probe, are required for the diagnosis of Ca prostate, staging required consist Endo rectal Ultrasound, Computerized Tomography (CT) and Magnetic Resonance Imaging (MRI) for locally advanced disease. Liver function test, serum calcium, acid phosphates, X-Ray Lamb sacral Spain, Bone Marrow Cytology and Bone Scan For detection of bony metastasis.

Management depends largely on the stage of the disease. For localize prostate cancer, stage 1 and 2 treated by radical prostatectomy can offer a cure. Side effects of surgery include erectile dysfunction and incontinence. Carcinoma of prostate is also radiosensitive can be given as external beam radio therapy of in the form of brechy therapy , hormonal therapy, such as LHRH analogues, and anti androgens are used in locally advance or stages 3 and 4 metastasic

disease. Hormones do not cure: but slow the progression of the cancer and gene therapy can be given.

Follow up consist of PSA, tumor surveillance ad other therapeutic options can be considered if the PSA starts to rise. Chemotherapy is increasingly being used for hormone escaped prostate cancer.

## PATIENTS & METHODS

It was a prospective study carried out at surgical wards of People's Medical College Hospital, Nawabshah from October 2008 to October 2010.

Detailed history, clinical examination and Investigations were taken and recorded on a preformed designed for the study. Study variable used were age, nodularity of prostate, DRE findings, PSA ratio and Histopathological results. 50 Patient were included in the study with enlarged prostate. Fibro tic prostate, Hypertrophy of bladder neck were excluded. All the patients were investigated for, Blood sugar, blood Urea, Serum Electrolyte/ creatinine, Blood Complete Picture, Liver function test, serum calcium, acid Phosphates, PSA, X-ray chest, X-Ray Lumbo sacral spine, trans rectal , Endo luminal ultra sound, flow metery, trans rectal biopsy, C.T scan, Bone scan MRI and General assessment. Out of 50 patients 48 were under went surgery and tissue sent for histopathology.

Stestical package for social sciences SPSS version 10 was used for statistical analysis of the data.

## RESULTS

This was a hospital based series study of 50 patients. The maximum numbers of patients were in age group of 55 to 75 years. The peak incidence of prostatic carcinoma seen in 65 years of age. Out of 50 patients, 15 patients were present increase frequency of micturition, 15 patients were present retention of urine, 10 patients were present bilateral inguinal hernia, 5 patient were present hematuria and 5 patients were present poor stream. (Table 1)

On DRE finding 43 patients (86%) prostate were feel soft to firm mucosa mobile, smooth, regular.7 Patients (14%) were suspicious malignant on the basis of DRE mucosa of prostate were fix, hard, irregular and asymmetrical. (Table 2)

PSA report were showed 30 patients (60%) were 6 n gm ml, 8 patients (16%) were 10 n gm ml. 5 patients (10%) were 15 n gm ml, 7 patients (14%) 20 – 30 n gm ml. Strongly proved malignant. (Table 3)

Ultra sound report of residual urine were showed 30 patients (60%) having 100 ml of residual urine.10 patients (20%) were 150 ml of residual urine , 5 patients (10%) were 200 ml of residual urine, 5 patient (10%) were 250 ml of residual urine (table 4)

48 patients under went surgery while 2 patients unfit for surgery, in which 43 patient (86%) were operated trans vesicle approach. 5 Patients (10%) were operated retro pubic approach .( Table 5)

Histopathological reports of 43 patients (86%) were showed normal prostate. 7 patients (14%) were adeno carcinoma of prostate. (Table 6)

**Table 1: Patients presentation in BPH**

Sign and Symptoms	No of Pts	Percentage
Frequency of urine	15	30%
Pretension of urine	15	30%
Bilateral inguinal hernia	10	20%
Hematuria	5	10%
Poor Stream	5	10%
Total	50	100%

**Table 2: Digital rectal examination (BPH)**

Mucosa soft, mobile smooth	43	86%
Mucosa fix hard irregular	7	14%
Total	50	100%

**Table 3: Prostates specific antigen report**

Level of PSA	NO Of Patients	Percentage
6 n gm ml	30	60%
10 n gm ml	8	16%
15 n gm ml	5	10%
20-30 n gm ml	7	14%
Total	50	100%

**Table 4: Result of Abdominal ultra sound**

Residual urine	No of Patients	Percentage
100 ml of residual urine	30	60%
150 ml of residual urine	10	20%
200 ml of residual urine	5	10%
250 ml of residual urine	5	10%
Total	50	100%

**Table 5: Operative procedure**

Operative procedure	No of Patients	Percentage
Trans vesicle approach	43	86%
Retro pubic approach	5	10%
Unfit for surgery	2	4%
Total	50	100%

**Table 6: Histopathological report**

Evidence of report	No of Patients	Percentage
Normal Report	43	86%
Adenocarcinoma of prostate	7	14%
Total	50	100%

## DISCUSSION

Carcinoma of Prostate is regarded as the most common and frequent endocrine malignancy with a variable geographic and ethnic incidence all around the world (17). The overall incidence was reported to be increasing world wide with changing characteristics (1). A long standing and unresolved issue is whether benign enlarged prostate is significantly associated with carcinoma. In this study, 15 patients were present increase frequency of micturition, 15 patients were present retention of urine, 10 patients were present bilateral inguinal hernia, 5 patient were present hematuria and 5 patients were present poor stream. The diagnosis of malignancy in benign enlarged prostate is easily made by different methods such as DRE, PSA, Transrectal biopsy or Surgical excision , however the incidence of malignancy in benign enlarge prostate was reported in 1930 (11%), 1940s (7%).Bhatti et al observed incidence 4.5%.Hamid A observed incidence 4%, CKMHO et al observed in Arg. Arg genotype were also higher in the BPH 25.5% During this study incidence of malignancy were observed 7 patients (14%) out of 50 patients in benign enlarge prostate. In this study 43 patients were operated through Transevesical approach, 5 patients were operated through rteriorpubic approach and 2 patients not fit for surgery. Cooner et al were detection of malignancy in 14% of patients on the basis of PSA, DRE, Transerectal Ultra sound. Javed et al were detection of cancer in 6 % on basis of PSA, DRE, Transerectal Ultrasound. In this study cancer were detected on basis of DRE, PSA & Histopathological. Report.

## CONCLUSION

Carcinoma of Prostate was more common in Benign enlarged prostate. Carcinoma of prostate was prevalent in Sixth decade of life. Adeno carcinoma was more common in benign enlarged prostate. Frequency was seen in 7 patients (14%).

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