MEDICAL CHANNEL

Original Article

SURGICAL INTERVENTION OF EARLY DIAGNOSIS OF CARCINOMA PROSTATE IN SURGICAL WARD AT PEOPLES MEDICAL COLLEGE HOSPITAL NAWABSHAH

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ABSTRACT

Aims of Study: To determine the surgical intervention of early diagnosis of carcinoma prostate in surgical ward.
Study Design: Prospective observational study:
Place and Duration: Two years study from January 2009 to December 2011. 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 chest, Lumbo sacral spine, Trans rectal, Endo luminal ultra sound, flowmetery, Trans rectal biopsy, C.T scan, Bone scan and General assessment. All Patients with enlarged prostate included out of 50 patients 47 patients under went surgery and tissue sent for histopathology for confirmation and margin free tumor
Result: In this study of 50 patients of enlarge prostate total number of patients were in age group 50 to 80 years, Out of 50 patients 6 patients suspected malignant on the basis of DRE. But PSA will raise in 5 patients. Regarding the histopathology results 5 patients showed malignancy adeno carcinoma. 5 pts were treated Radical prostatectomy.
Conclusion: Carcinoma of prostate is a fatal disease of male pts if not diagnose and treat early so patients can die if disease in advance stage.

Key words: Carcinoma prostate, Radical prostatectomy, adeno carcinoma of prostate.

INTRODUCTION

Carcinoma of prostate is a most common malignant tumor seen in male patients. Those patients came in O P D With complain of irritative and obstructive symptoms of lower urinary tract system.[1] Carcinoma of prostate is not diagnose early or neglected cases of benign enlarged prostate for long time. So, patients can die within year if developed carcinoma of prostate[2 3]. Carcinoma of prostate constitutes a major health problem, it is the most common malignant tumor in men over the age of 60 years. It is estimated that lifetime risk of Western men having Carcinoma of prostate is about 30%. Approximately 50% of patients dies within 2 years due to metastasis. 5 years survival rate is less than 13%.

Virtually all cancers are adenocarcinoma with the grade being indicated by the Gleason score and Tumor, Node, Metastasis (TNM Classification).

Mostly patients present with obstructive symptoms and irritative symptoms [2 3]. So, diagnostic techniques used in carcinoma of prostate have been evolved greatly with technological developments.[4] Now a days, triple assessment is necessary for diagnose a case of benign enlarged prostate and carcinoma prostate included, digital rectal examination (DRE), Prostate Specific Antigen (PSA) and trans rectal (endoluminal) ultra sound with biopsy [5,6,7]. Triple assessments are helpful for diagnosis of carcinoma of prostate. The

diagnosis has been based primarily on the ability of the index finger 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 40% to 60 % in population. Tumor marker, such as serum Prostate Specific Antigen (PSA) level[8] and biopsy via trans rectal ultra sound probe, are required for the diagnosis of Ca prostate,[9] 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 chest and Lamb sacral Spain, Bone Marrow Cytology and Bone Scan For detection of systemic and bony metastasis[10,11,12].

Management depends largely on the stage of the disease and general condition of patient. Stage 1 and 2 treated by radical prostatectomy can offer a cure[13,14]. Complications of surgery include haemorrhage, infection, urinary bladder implantation, erectile dysfunction and incontinence. Carcinoma of prostate is also radiosensitive can be given as external beam radio therapy of in the form of brachy therapy ,Chemo therapy, hormonal therapy, such as LHRH analogues,[15] and anti androgens are used in locally advance or stages 3 and 4 disease [16] . Hormones do not cure: but slow the progression of the cancer and those patients having strong family history of carcinoma prostate so gene therapy can be given.

Follow up consist of PSA, tumor surveillance add 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 January 2009 to December 2011.

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, flowmetery, trans rectal biopsy, C.T scan, Bone scan MRI and General assessment. Out of 50 patients 47 were under went surgery and tissue sent for histopathology, for confirmation, margin free tumor.

Statistical 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 50 to 80 years. The peak incidence of prostatic carcinoma seen in 60 years of age. Out of 50 patients, 21 patients were present irritative symptoms 24 patients were present obstructive symptoms, 5 patient were present haematuria .(Table 1)

On DRE finding 44 patients (88%) prostate were feel soft to firm mucosa mobile, smooth, regular.6 Patients (12%) were suspicious malignant on the basis of DRE mucosa of prostate were fix, hard, irregular and asymmetrical. (Table 2)

PSA report were showed 35 (70%) pts were 4 n mol/ ml, 5 (10%) pts were 8 n mol/ ml. 5 (10%) pts were 14 n mol/ ml, 5 (10%) pts 18 – 32 n mol/ ml. Strongly proved malignant. (Table 3)

Histopathological reports of 35 patients (70%) were showed normal architecture of prostate 10 patients (20%) were showed hyperplasia and 5 (10%) adenocarcinoma of prostate. (Table 4) 47 patients under went surgery while 3 patients unfit for surgery, in which 42 patient (84%) were operated trans vesicle prostatectomy approach. 5 Patients (10%) were operated Radical prostatectomy

Table 1

Patients presentation in BPH and Carcinoma Prostate

Sign and Symptoms	No of Pts	Percentage
Irritative symptoms	21	42%
Obstructive	24	48%
Haematuria	5	10%
Total	50	100%

Table 2:

Digital rectal examination of Prostate

Mucosa soft, mobile smooth	44	88%
Mucosa fix hard irregular	6	12%
Total	50	100%

Table: 3

Prostates specific antigen report

Level of PSA	No of Patients	Percentage
4 n n mol/ ml	35	70%
8 n mol/ ml	5	10%
14 n mol/ ml	5	10%
18-32 n mol/ ml	5	10%
Total	50	100%

Table: 4

Histopathological report

Evidence of report	No of Patients	Percentage
Normal architecture	35	70%
Hyperplasia	10	20%
Adenocarcinoma of prostate	5	10%
Total	50	100%

Table: 5

Operative procedure

Operative procedure	No of Patients	Percentage
Trans vesicle approach	42	84%
Radical prostatectomy	5	10%
Unfit for surgery	3	6%
Total	50	100%

(Table 5).

DISCUSSION

Carcinoma of prostate is a most common malignant tumor seen in male patients. Those patients came in complain of iritative and obstructive symptoms of lower urinary tract system[1,2]. Carcinoma of Prostate is regarded as the most common and frequent endocrine malignancy with a variable geographic and ethnic incidence all around the world[15]. The overall incidence was reported to be increasing world wide with changing characteristics. A long standing and unresolved issue is whether benign enlarged prostate is significantly associated with carcinoma. In this study, 21 patients were present irritative symptoms. 24 patients were present obstructive symptoms. 5 patients were present haematuria. The diagnosis of malignancy in benign enlarged prostate is easily made by different methods such as DRE, PSA, Transrectal ultra sound and biopsy [16,17] , however the rate incidence of malignancy in benign enlarge prostate was reported in 1930 (11%), 1940s (7%). Red man MW, et al.[18] observed incidence 4.5%. Hamid A observed incidence 4%, CKMHO et al.[19] observed in his study patient suffered in 25.5%. During this study incidence of malignancy were observed 5 patients (10%). Cooner et al and were detection of malignancy in 14% of patients on the basis of PSA, DRE, Trans rectal Ultra sound. Javed et al[20] were detection of cancer in 6 % on basis of PSA, DRE, Trans rectal Ultrasound. In this study cancer were detected on basis of DRE, PSA, Trans rectal Ultrasound. & histopathological report, detection of malignancy in 5 patients. D'Amico et al observed in his study patient treated by androgen ablation[21].Kohli et al. Observed in his study patient treated by medical therapy[22]. In this study 42 patients were operated through Transvesical prostatectomy, 5 patients were operated through Radical prostatectomy, and 3 patients not fit for surgery. After surgery, patients referred in oncology department for further management.

CONCLUSION

Carcinoma of Prostate was more commonly seen in Benign enlarged prostate. Carcinoma of prostate was prevalent in Sixth decade of life. Carcinoma of prostate diagnosed on the basis of DRE , PSA, Transrectal Ultra sound and Biopsy. Stage 1,2 treated by Radical prostatectomy along with Radiotherapy, Hormone and Chemotherapy.

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