

COMPLICATIONS OF OPEN PROSTATECTOMY: LARKANA EXPERIENCE

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ABSTRACT : Complications of 112 cases of open prostatectomy (108 suprapubic transvesical, 4 retropubic) were studied in Surgical Unit II, Chandka Medical College Hospital, Larkana. Mean age of the patients was 61.22 years, maximum number i.e. 44.46% belonged to the age group of 51 to 60 years. Average hospital stay of the patients was eight days. Commonest complications encountered were wound complications seen in 25 (22.32%) cases comprising of seromas - 6 (5.35%) cases, haematoma - 4 (3.67%), cellulitis - 3 (2.67%), stitch abscess - 6 (5.35%), abscess in 5 cases and wound dehiscence in one (0.89%). Next most common complication was reactionary haemorrhage/clot retention in 16 (14.28%) cases and secondary haemorrhage in one (0.89%) case. Epididymo-orchitis/epididymitis occurred in 3 cases (2.67%), pyelonephritis in two (1.78%), retrograde ejaculation in 6 (5.25%), deep vein thrombosis in one (0.89%), urinary fistula leakage in 9 (8.03%) stricture of urethra in 6 (5.35%) and incontinence of urine in 4 (3.57%) cases. It is concluded that we came across relatively more wound complications which could have been prevented. We recommend urine culture and sensitivity in all cases. Operation may be delayed till urine becomes sterile, besides preoperative and postoperative antibiotics are also recommended.

KEY WORDS : Open prostatectomy, Complications, TURP.

INTRODUCTION

Senile enlargement of the prostate gland is a very common disorder and its history is as old as the origin of man himself¹. Symptomatic benign prostatic hyperplasia (BPH) is a common condition in the older men and has significant impact on their daily lives².

Benign prostatic hyperplasia (BPH) is not an uncommon disease in this part of Pakistan. It is the most common cause of bladder outlet obstruction and voiding symptoms in elderly men³. Transurethral resection of prostate (TURP) or open prostatectomy are currently the most effective therapies for BPH, and are considered as the gold standard for treatment⁴.

Although TURP is the common surgical procedure practised in western countries, open surgery is still popular in developing countries due to lack of facilities and associated complications. e.g. vesical calculus and diverticulum⁵. Besides, the size of the prostate is also large as patients come late. The aim of this study was to assess the fre-

quency of complications after open prostatectomy in our setup and to review the literature.

PATIENTS & METHODS

This study was conducted at Surgical Unit II of Chandka Medical College Hospital, Larkana from Jan. 1996 to Dec. 1997 with follow up of one year. We receive patients from various districts of upper Sindh, lower Punjab and adjacent areas of Balochistan. In this study 112 cases of symptomatic BPH were included who underwent open prostatectomy. Those patients with positive urine cultures were deferred for operation till their urine became sterile on appropriate antibiotics. In order to conduct this study a special proforma was designed in which post operative complications were recorded. Investigations done included Hgb %, urine DR, blood urea, creatinine, urine culture and sensitivity, plain X-ray abdomen and X-ray KUB. Intravenous urography, cystoscopy, ultrasound examination, serum acid phosphatase, serum alkaline phosphatase and ECG were also done in relevant cases. All patients were operated by consultant surgeons and registrars/post

graduate students (under supervision). After operation prostatic tissue was submitted for histopathological examination.

RESULTS

Open prostatectomy was performed in 112 cases. In 108 cases suprapubic transvesical prostatectomy was performed, while in 4 cases retropubic prostatectomy was done. Our youngest patient was 48 years old and oldest 78 years. Mean age was 61.22 yrs. (Table 1). Maximum number of patients i.e. 44.64% belonged to the age group of 51 to 60 years.

Table 1. Age Incidence (n=112)

Age in Years	No. of Patients	%
41-50	6	5.35
51-60	50	44.64
61-70	39	34.82
71-80	17	15.17

In our study the most common complications were wound associated (Table 2) seen in 25 (22.32%) cases. They included seromas in 6 (5.35%) cases, haematoma in 4 (3.57%) cases, cellulitis in 3 (2.67%) cases, stitch abscess in 6 (5.35%) cases, abscess in 5 (4.46%) cases and wound dehiscence in one (0.89%) case.

Table 2. Wound Complications (n=25)

Type	No. of Patients	%
Seroma	6	5.35
Stitch Abscess	6	5.35
Abscess	5	4.46
Haematoma	4	3.57
Cellulitis	3	2.67
Wound dehiscence	1	0.89

Next common complication which we found in this study was bleeding in the form of reactionary haemorrhage/clot retention in 16 (14.28%) cases and secondary haemorrhage in 4 (3.75%) cases (Table 3).

Urinary fistula/leakage was seen in 9 (8.03%) cases while retrograde ejaculation and stricture urethra occurred in 6 (5.35%) cases, and incontinence of urine in 4 (3.57%) cases.

Epididimo-orchitis/epididymitis was found in 3 (2.67%) cases, pyelonephritis in 2 (1.78%) and deep vein thrombosis in one (0.89%) case.

Table 3. Postoperative Complications

Complication	No. of Patients	%
Wound Complications	25	22.32
Reactionary Haemorrhage/ Clot Retention	16	14.28
Secondary Haemorrhage	4	3.75
Urinary fistula/ Leakage	9	8.03
Retrograde Ejaculation	6	5.35
Stricture Urethra	6	5.35
Incontinence of urine	4	3.57
Epididimo-orchitis/ Epididymitis	3	2.67
Pyelonephritis	2	1.78
Deep Vein Thrombosis	1	0.89

The average duration of hospital stay was 8 days, longest duration being 26 days in one patient, who developed reactionary haemorrhage. Most cases were discharged after removal of all stitches, because of patients belief that if they go earlier their wound will become infected. However, in few instances patients were discharged after 5 days and stitches removed on eighth post operative day.

DISCUSSION

The maximum number of BPH patients (45%) was seen between 51-60 years of age, a finding similar to that reported by Manzar (40%)⁵ at Nawabshah. The mean age of our patients was 61.22 years. As reported by Memon⁶ the average age in his series was 62 years whereas according to Khan et al⁷ it was 68.1 years.

We noticed wound complications after open prostatectomy as the commonest, as seen in 25 cases (22.32%) out of 112. In literature wound infection was reported by Luttwak et al⁸ as 3% and Memon⁶ as 10%. According to Bedolov et al⁹ preope and postoperative antibiotic therapy reduces the incidence of wound complications and also shortens the total period of hospitalization in those patients who have gram negative infection in their urine before operation. In our study we used antibiotics at the time of induction of anaesthesia and also during the postoperative period.

It is a well accepted fact as described by Richter et al¹⁰ that post prostatectomy complications are directly related to the presence of urinary tract infection at the time of surgery, so he also stressed that elective prostatectomy should be deferred until urine is sterile. In our setup, most patients are uneducated and present very late when their disease is already advanced like retention of urine with back pressure effect. In this study, urine of every

patient was sent for culture and sensitivity, but culture was positive only in 16 (14.28%) cases, probably the patients had already taken antibiotics prescribed by general practitioners.

In this study reactionary haemorrhage/clot retention occurred in 16(14.28%) cases and secondary haemorrhage in 4(3.75%) cases. Khan et al⁷ noticed bleeding in 3.11% cases whereas Memon⁶ reported haematuria in 11% and clot retention in 0.5% cases. Mier et al¹¹ noticed clot retention in 6.7% cases. The high rate of bleeding in our study may be due to operations performed by junior doctors like registrars and post graduate students.

In this study, epididymo-orchitis/epididymitis was found in 4 (3.67%) cases while Luttwak et al⁸ reported it in 3% and Khan et al⁷ in 1.28% cases. Pyelonephritis occurred in this study in two (1.78%) cases while Khan et al⁷ reported urinary infection in 2.12% and Luttwak et al⁸ in 20.5% cases.

In our study urinary fistula leakage was seen in 9 (8.3%) cases while Memon⁶ reported it in 5% cases. Stricture urethra was found in this study in 6 cases (5.35%) while Luttwak et al⁸ reported it in 3% cases.

Kablin¹² remarked urinary incontinence as the most debilitating and devastating complication following prostatectomy. In our study 4 (3.5%) cases developed transient incontinence which improved gradually within six months. Memon⁶ reported it in 3% and Luttwak et al⁸ in 2% cases.

We have already mentioned that open prostatectomy is still considered an important surgical approach in our region. In this regard we are supported by Jepsen and Bruskewitz¹³. According to them open prostatectomy is an almost efficient treatment of BPH for relieving symptoms and improving urinary flow, but they also remarked it as the most invasive and morbid procedure. They also stressed that TURP is still the golden standard for treatment of BPH, so open prostatectomy has to lower perioperative mortality than TURP.

According to Holtgrew¹⁴ the outcome of open prostatectomy is marginally better than TURP in relation to symptomatic relief in selected patients. However, open prostatectomy suffers from lack of patients acceptance,

increased postoperative discomfort and prolonged hospitalization.

It is recommended that urine for culture and sensitivity should be done in all cases. Operation may be delayed till urine becomes sterile and pre-operative and post operative antibiotics should be given in appropriate cases in order to reduce frequency of complications.

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