PERINEAL PROSTATECTOMY

Pages with reference to book, From 204 To 206

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Abstract

A series of twenty-five medically high risk prostatic patients, on whom surgery was performed by the perineal route, is presented. Its advantages, disadvantages and technique are discussed. Prostatectomy by the perineal route is strongly recommended for the medically unfit patient who may be condemned to a "catheter life" owing to poor general health (JPMA 30:204, 1980).

Introduction

The enlarged prostate is a disease encountered in the elderly. It has been estimated by Blandy (1971). that approximately 10% of all men will require surgery for prostatic disease. The high incidence of surgery demands a constant review of results by the surgeons. It is evident that the ideal surgery for prostate must secure complete excision of the existing obstruction together with all the potentially obstructing tissue. The mortality rate must be reduced to its minimum, the demands on post-operative nursing care should not be excessive and smooth recovery with a rapid return to normal health is of the utmost importance. The challenge of finding the ideal type of prostatectomy has produced different approaches with strong protagonists and antagonists for each method. Owing to the variety of prostatic pathology encountered no single method can ever prove to be adequate. There is a choice of four surgical approaches to the prostate i.e. transvesical, retropubic, transurethral and perineal. Although there has been a significant improvement in the safety of the prostatectomy procedure in the last half of this century there has been however little change in the mortality rate among the high risk patients. The purpose of the current study has been to increase our knowledge concerning the possible indications for perineal prostatectomy in these unfit patients with the aim of reducing the mortality and morbidity rates.

Material and Methods

About 150 patients with prostatic obstruction are admitted every year into the D.H.Q. Hospital, Faisalabad. They arc divided into three groups according to their medical state based on the criteria as presented by Singh et al (1973). The age of the patient is not considered to be a bar to any group (Table I)

Table 1: Grading of Cardiorespiratory Status (Singh et al., 1973)

Grade 1:	No significant concurrent disease.
Grade 2:	(*a*) Myocardial infarction or cerebrovascular accident more than 6 months before operation.
	(*b*) Congestive cardiac failure controlled on treatment.
	(*c*) Benign Arrhythmias.
	(*d*) Hypertension requiring treatment.
	(*e*) Moderate chronic obstructive airways disease.
	(*f*) Diabetic requiring treatment.
Grade 3:	(*a*) Myocardial infarction or cerebrovascular accident within 6 months before surgery.
	(*b*) Uncontrolled ventricular ectopics.
	(*c*) Complete heart block.
	(*d*) Inadequately controlled congestive cardiac failure or severe chronic obstructive airways disease with gross limitation of normal daily activities.

as stressed by the above author. The patients suffering from cardiorespiratory disease and senile dementia are included in grade 3. Pre-operative tests, Hb, blood urea, chest X-ray and ECG (in cardiac cases) are carried out. Surgery is performed on the fit patients, labelled grade 1 and 2, via the transvesical or retropubic route whereas Young's method is employed for the grade 3 patients.

O perative Technique

A spinal analgesia of 1 ml of einehocaine is given with the patient in the sitting position. The patient is then placed in the reverse exaggerated lithotomy position with the sacrum tilted up. A classical inverted V incision is given extending from the perineoscrotal junction towards the medical side of such ischial tuberosity. The central tendon of the perineum is divided. First an artery forceps and then a finger is inserted in the ischiorectal fossa on each side keeping the finger close to the prostate and away from the rectum. The prostate is gently separated from the rectum which is retracted backwards out of harms way. The levator ani are retracted laterally and the prostate comes into view. The prostate is pulled down with a retained Foleys urethral catheter as advised by Saadi (1974). We do not open the membranous urethra nor do we damage the bulbo-urethralis muscle. It is not our custom to use Young's bifid prostatic retractors of Lowsley's prostatic tractors. An Ellis tissue forceps is applied to the posterior capsule of the prostate (anatomical and false capsule) and transverse incision is made about 1 cm, from the vesicoprostatic junction upto the place of cleavage between the adenoma and the false capsule. Using the index finger theprostate is enucleated in a manner similar to the conventional prostatectomy procedure. The neck of the bladder is grasped with tissue forceps and is pulled down, loose tags are removed and the interior of the bladder is examined for any pathology. The prostatic capsule is sutured with a couple of interrupted chronic catgut sutures with the aid of a boomerang needle. A corrugated Rubber drain is inserted and the wound is closed in layers. A Foley's catheter No. 24 F.R. is retained through the urethra.

One or two units of blood are transfused. Post-operatively a suitable antibiotic, analgesics and 500 ml 10% mannitol (intravenous) are administered. The patient is given full diet and ambulation is encouraged within 24 hours of surgery. The drain is removed on the 3rd postoperative day and sutures and Foley's catheter arc removed on the 12th day.

Results

250 patients underwent prostatic surgery from 13-12-1977 to 12-6-1979. Out of these, 25 patients were classified as grade 3 and these were selected for prostatic surgery via the perineal route. 15 suffered from cardiac condi-tions, 7 had severe pulmonary disease and 3 were senile (Table II).

Table II: Medical Diseases

Medical Disease	*Number of cases*
Cardiac	15
Bronchial Asthma	3
Pulmonary T.B.	4
Senility	3
Total	25

In a number of patients an indwelling suprapubic or urethral catheter had been retained for as long as 1-1/2 years before operation. In all cases the blood urea was raised which may have been due to constant urinary tract infection.

There were a number of post-operative complications (Table III)

Table III: Complications of Perineal Prostatectomy

Complication	*Number*	*Treatment*	*Result*
Nil	9	—	—
Stricture Urethra	11	Dilatation	Good
Clots Retention	1	Suprapubic drainage	Good
Secondary Haemorrhage	1	Transfusion	Good
Haemotoma Scrotum	1	Evacuation	Good
Epididymarchitis	3	Conservative	Good
Bladder Stones	1	(After 6 months) removed	Good
Injury Rectum	4	Repaired	Good
Myocardial Infarction	1	Conservative	Died
Haemeptysis	1	Conservative	Survived
Incontinence after 3 months	2	Nothing	Dribbling
Perineal Urinary fistula	3	Dilatation urethra	No relief

like stricture of the urethra, secondary haemorrhage, incontinence, clot retention epidydimo-orchitis, haemoptysis, myocardial infarction, stone in the bladder, perineal urinary fistula and injury to the rectum. The most dreaded complication of injury to the rectum occurred in 4 patients. This is a hazard which every surgeon must face some time in his life (Winsbury-White). We did not send any tissue for histological examination but clinically all our cases were benign adenoma. There was only one post-operative death and this was caused by myocardial infarction. The average period of hospitalization for each patient was 22 days.

Discussion

Perineal approach as perfected by Young (1926) is the oldest method of prostatectomy after the transvesical route. Gulp (1967) and Wheeler (1975) claimed that when surgery by this route was employed the mortality and morbidity rate was lower in comparison to when other methods of therapeutic approach were used. This operation is less traumatic, the blood loss is minimum and it only requires a low-spinal or even local anaesthesia with the result that there is less lowering of the blood pressure and less disturbance of the respiratory movements. For this reason the mortality rate in our grade 3 patients was only 4%and this death was caused by myocardial ischaemia and not surgical trauma. This compares favourably with a mortality rate of 9.2% as reported by Singh et al (1973) and 9.9% by Sach and Marshall (1977) in their grade 3 patients who were operated on by other methods including, T.U.R. Incontinence of urine did not prove to be a serious problem in our series possibly because we took great care not to injure the bulbourethralis muscle, the membranous urethra or the external sphincter. Our patients usually gained control within one month of surgery. Urethral stricture proved to be the most common complication. This caused a temporary perineal urinary fistula which healed up except in three cases. However two or three dilatations caused the stricture to give way quite easily. So far, there has been no permanent stricture neither has there been any osteitis pubis or incisional hernia.

The main drawback to this surgery is that longer hospitalization is required in comparison to surgery by other routes.

Conclusion

Prostatectomy via the perineal route for high risk patients is most acceptable. Technically the procedure is slightly more difficult and certainly the stay in hospital is longer but there arc very few serious complications. It does not require many instruments, any special anaesthesia or highly specialised nursing care. Apart from this the mortality rate may be considered to be quite low.

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References

1. Blandy, J.P. (1971) Benign prostatic enlargement. Br. Med. J., 1:31.
2. Gulp, O.S. (1967) Radical Perineal Prostectomy; its past, present and possible future. J. Urol., 98:618.
3. Saadi, M.H. (1974) Perineal retropubic prostetectomy. Br. J. CIin.Pract., 28:331.
4. Sach, R. and Marshal, V.R. (1977) Prostatectomy; its safety in an Australian teaching hospital. Br. J. Surg., 64:210.
5. Singh, M., Tresidder, G.C. and Blandy, J.P. (1973) The evaluation of transarethal resection for benign enlargement of the prostate. Br. J. Urol., 45:93.
6. Wheeler, J.S. (1975) A modification of young procedure for radical perineal prostatectomy. J. Urol., 114:419.
7. White, H.P.W. Textbook of genito-urinary surgery. Edinburgh, Livingstone, 1948, pp. 491, 519.
8. Young, H.H. and Davis, D.M. Youngs' Practice of Urology. Vol. 2. Philadelphia, Saunders, 1926, p. 461, 1926.