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Surgery Illustrated – Surgical Atlas
Millin Retropubic Prostatectomy

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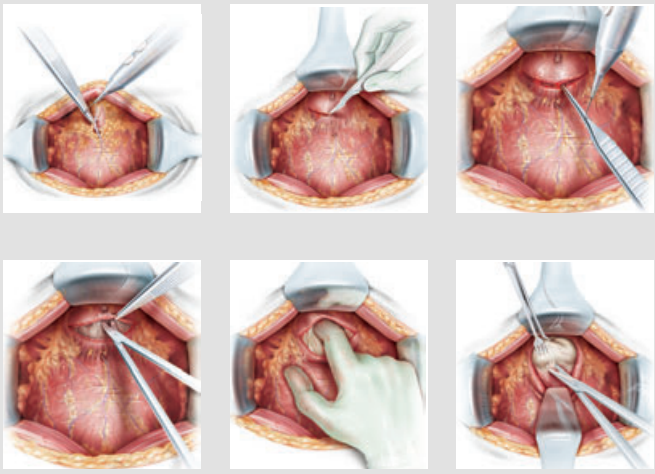
ILLUSTRATIONS by STEPHAN SPITZER, www.spitzer-illustration.com

MILLIN RETROPUBIC PROSTATECTOMY

The operation which Terence Millin described in 1945, retropubic prostatectomy is a very enjoyable operation to perform, particularly because it uses established anatomical principles as the basis for the procedure. In fact, it is well worth reading his original description in the Lancet in 1945, because most of what he says there is still relevant today and is a clear and well-written exposition of the surgical technique. It is an easily performed procedure, which was revolutionary at the time of its introduction because instead of a transvesical approach, it involved a transcapsular dissection of the prostatic adenoma.



INDICATIONS AND PATIENT SELECTION

The usual indication given for performing a Millin's Prostatectomy is for patients with prostates which weigh more than 80 gms. The weight should be assessed by a combination of clinical examination and transrectal ultrasound. It might be felt by some that this is a rather low prostatic weight at which to abandon TURP, but in that case the indication would be a size greater than that which the urologist feels that a TURP would be accompanied in 60 minutes. In the present day, laser technology has allowed large prostates to be removed by methods other than TURP and some have even said that the era of the Millin Prostatectomy is therefore over. I very much disagree with this and would not like to see the demise of such a satisfying surgical procedure, with excellent outcomes for the patient.

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SURGICAL PROCEDURE

The patient is placed supine on the operating table, and a moderate amount of breaking of the table may be helpful in affording greater exposure in the pelvis. No special instruments are required, although Millin did advocate the use of a bladder-neck spreader (which was very uncomfortable for the assistant to use) and an instrument which was a modification of a vulsellum forceps which looked like an angulated Alis clamp.

Figure 1

A Pfannenstiel incision is the standard approach, but some prefer a lower midline incision extending from umbilicus to pubic bone. A self-retaining retractor of the Forder or Finochietto variety is then inserted. There is usually fat lying on the prostate, and this can be removed by sweeping it away with a tissue forceps in an up and down direction. This prevents tearing of the veins, which would occur if the fat were removed side to side. The superficial dorsal vein is then exposed, and then diathermised or clipped and cut.

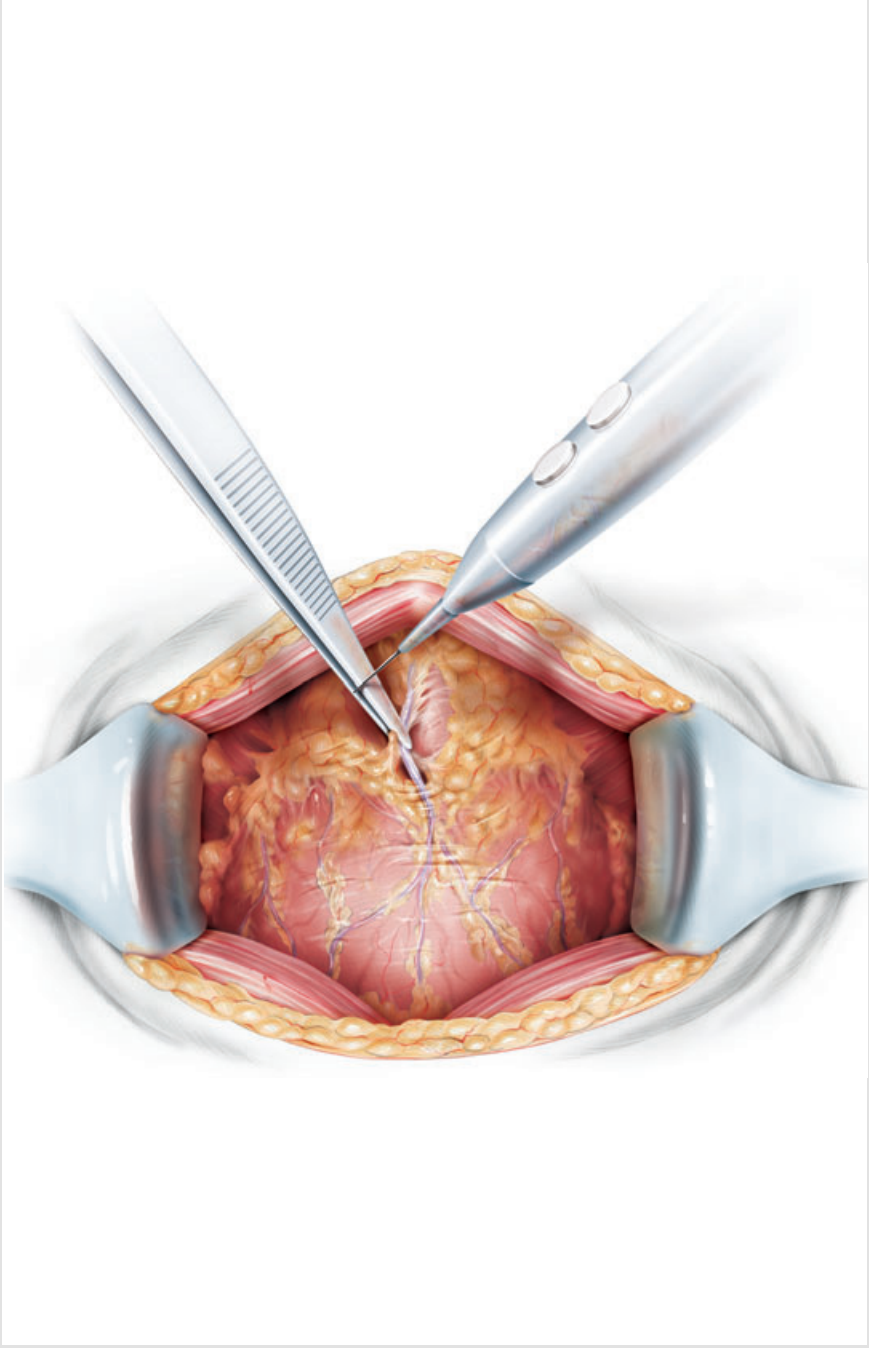

Figure 2

The prostate can then be clearly seen. There is no need to put swabs on either side of the prostate, or to insert sutures into the lateral limits of the capsular incision. A transverse incision is made in the prostatic capsule 1cm distal to the bladder neck. This can be performed with a size 11 or 15 blade, or with the diathermy.

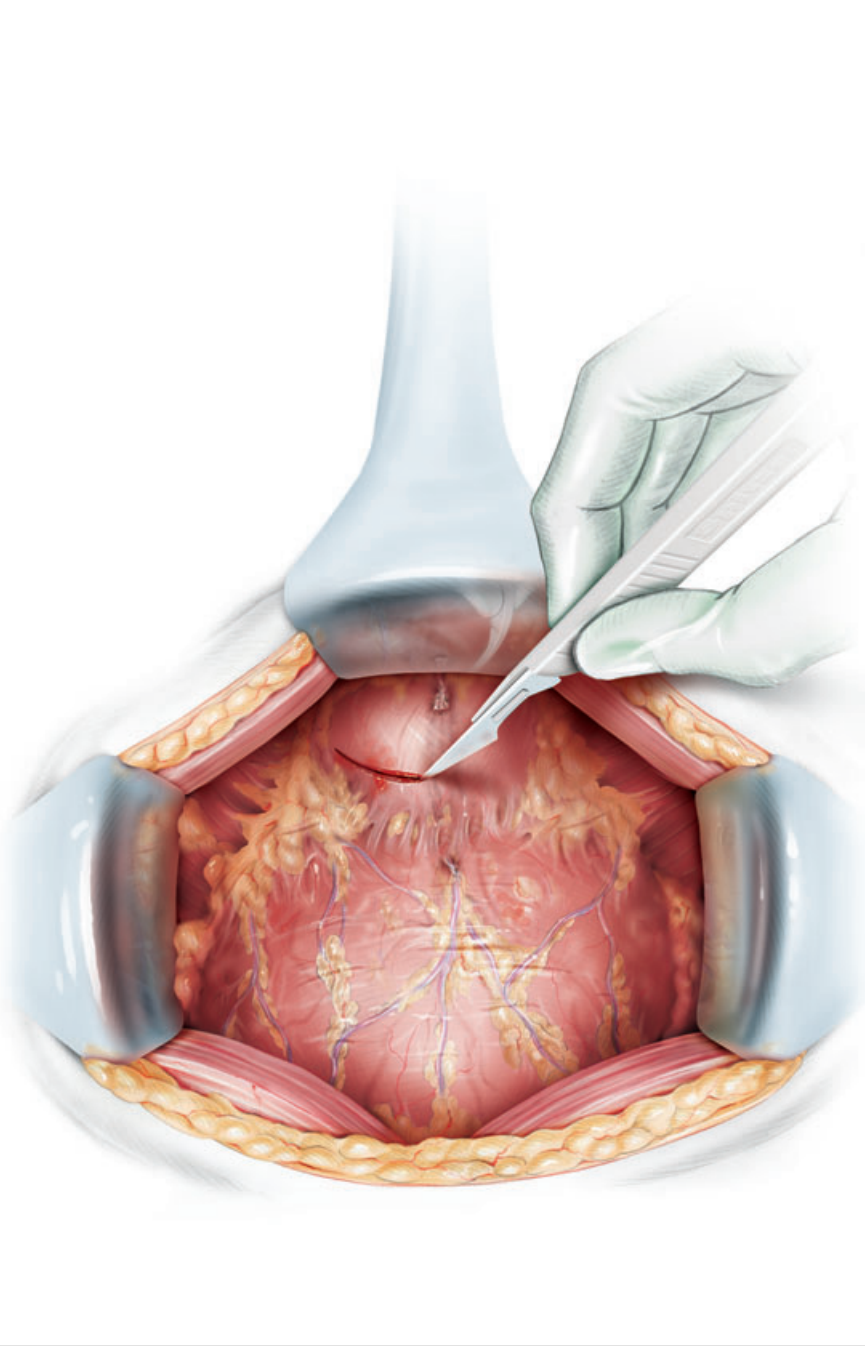

Figure 3

There may be brisk bleeding from some sizeable capsular veins so great care should be taken to stop this bleeding with pinpoint accuracy with the diathermy.

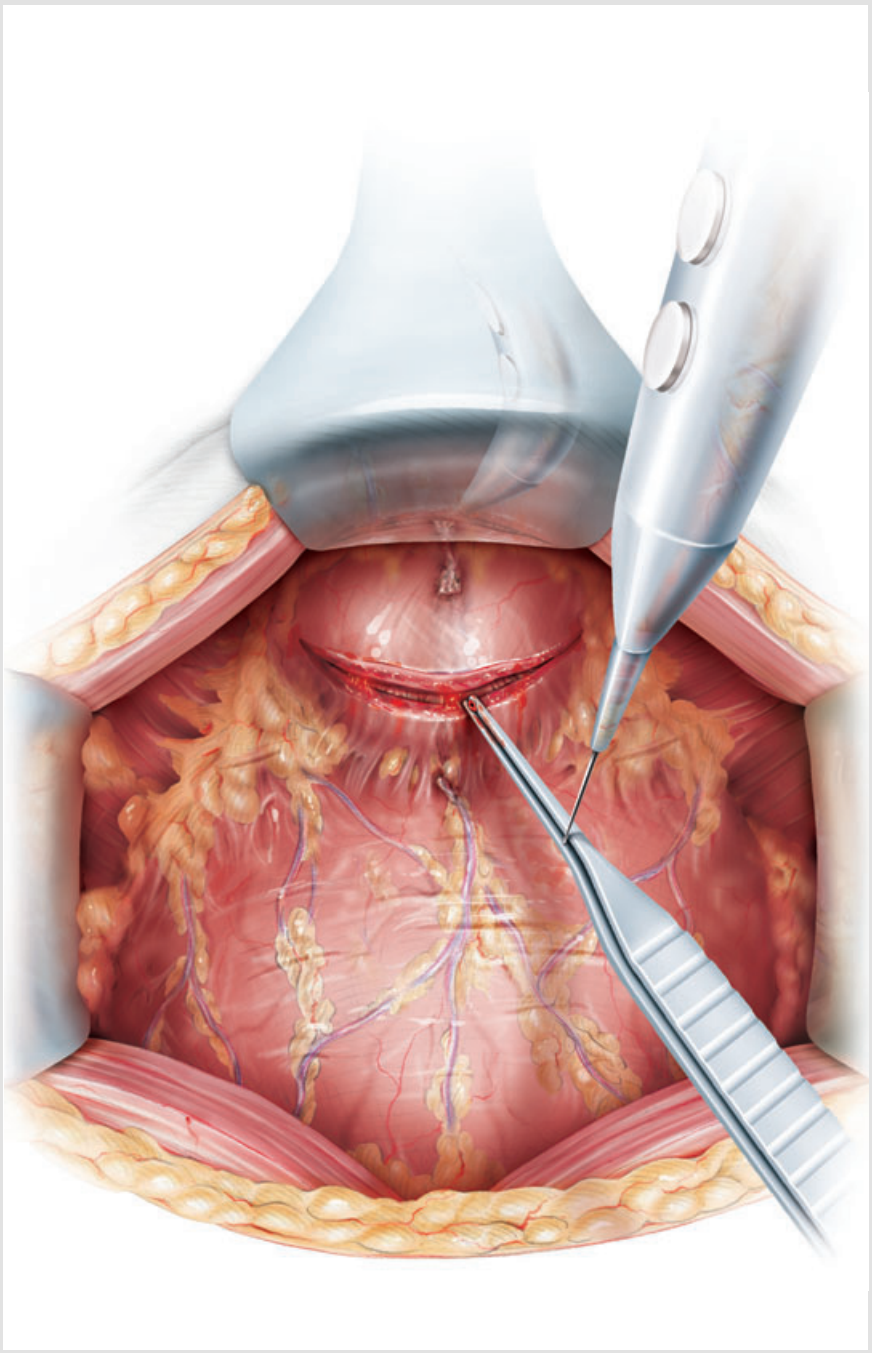

Figure 4

The prostatic adenoma will then be visible, and a plane between this and the capsule can then be opened up using a Metzenbaum scissors. The urologist will not experience any difficulty in finding this plane.

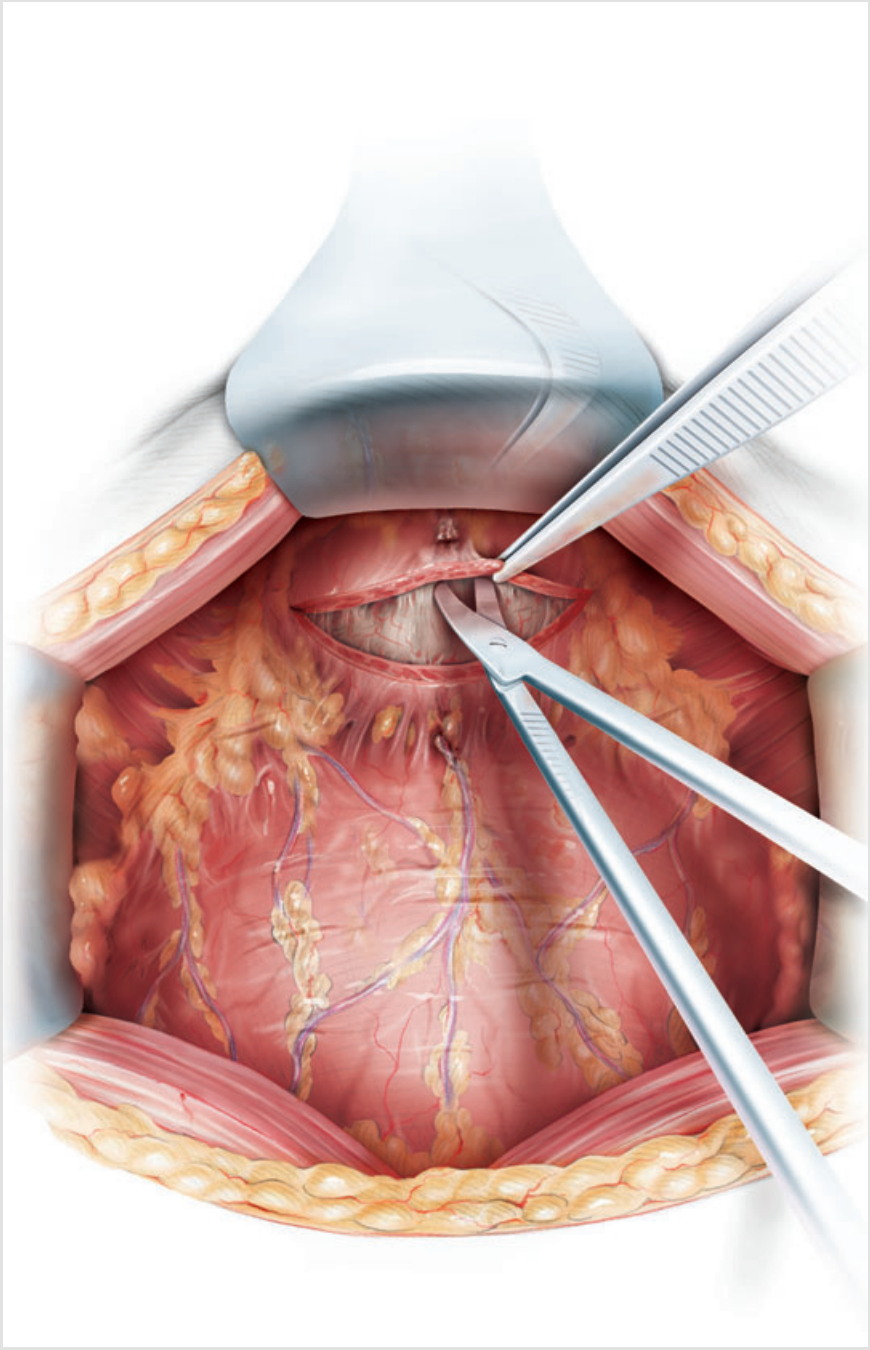

Figure 5

The index finger should then be inserted into this plane, which can be further developed by sweeping the finger from side to side and then posteriorly.

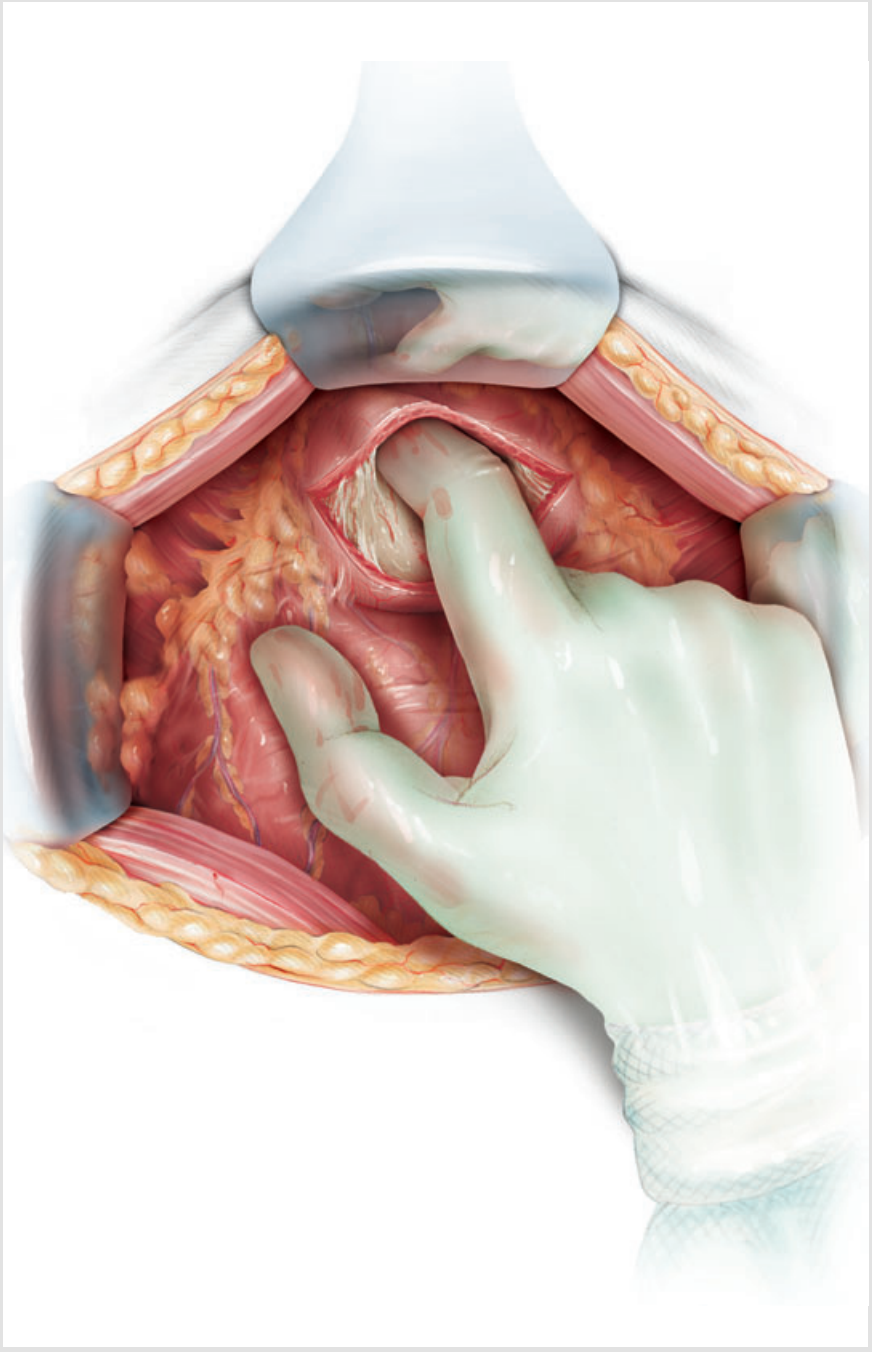

Figure 6

Sometimes adhesions between the adenoma and the capsule must be cut with a scissors under direct vision.

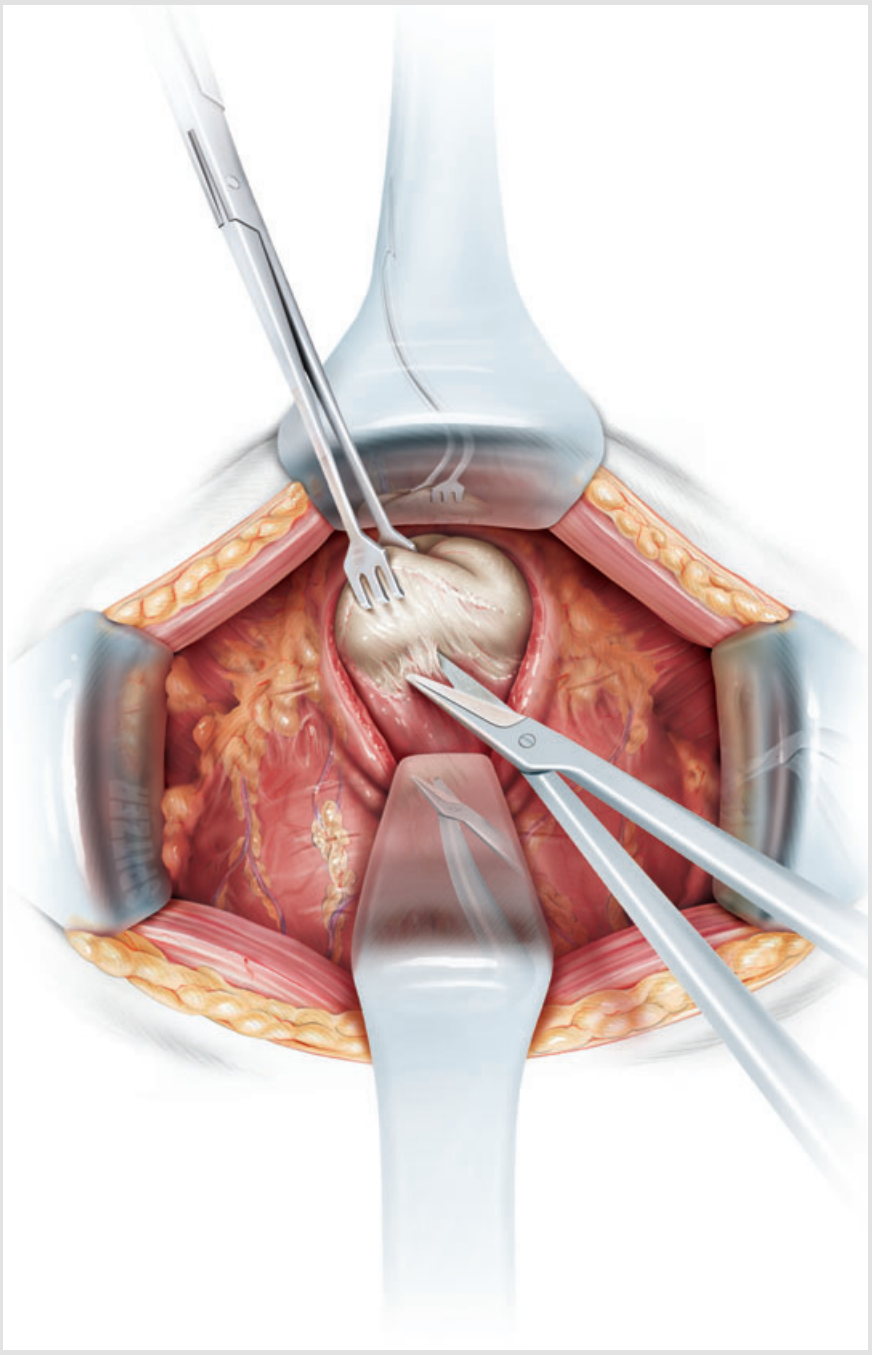

Figure 7

The urethra is then cut distally with the scissors. It is then lifted out of the prostatic cavity and the presence of any significant enlargement of the middle lobe established. The adenoma is then removed after separation from any bladder neck fibres. If there is any excess trigone, this should be excised and the trigone should then be sutured to the posterior capsule with 3/0 polyglycolic acid suture. If there are bleeding points within the prostatic cavity, these should be diathermised.

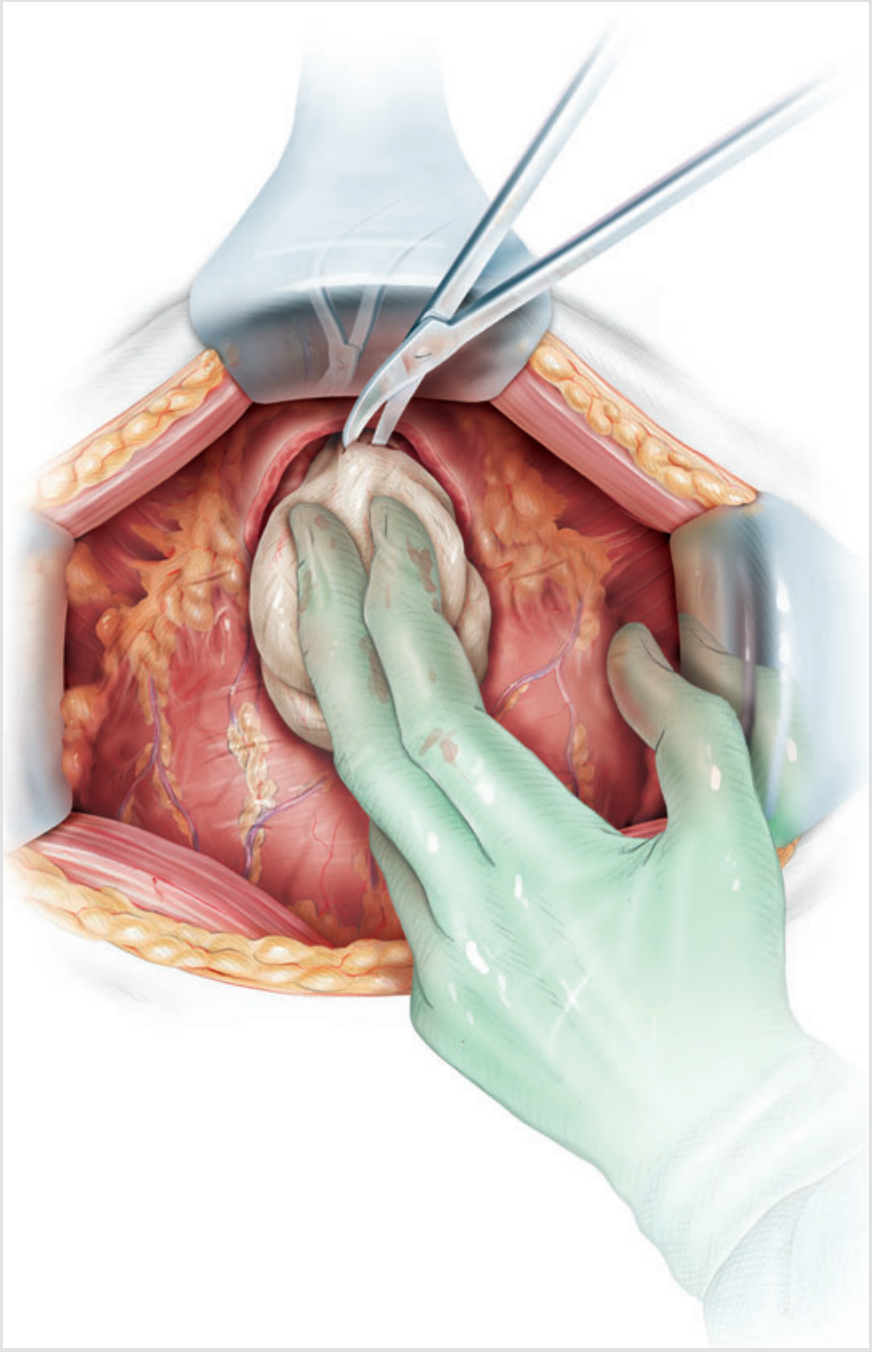

Figure 8

A figure-of-eight suture, using 0 polyglycolic acid suture is inserted in the manner shown. One should be inserted at either end of the capsular incision and should include the bladder neck.

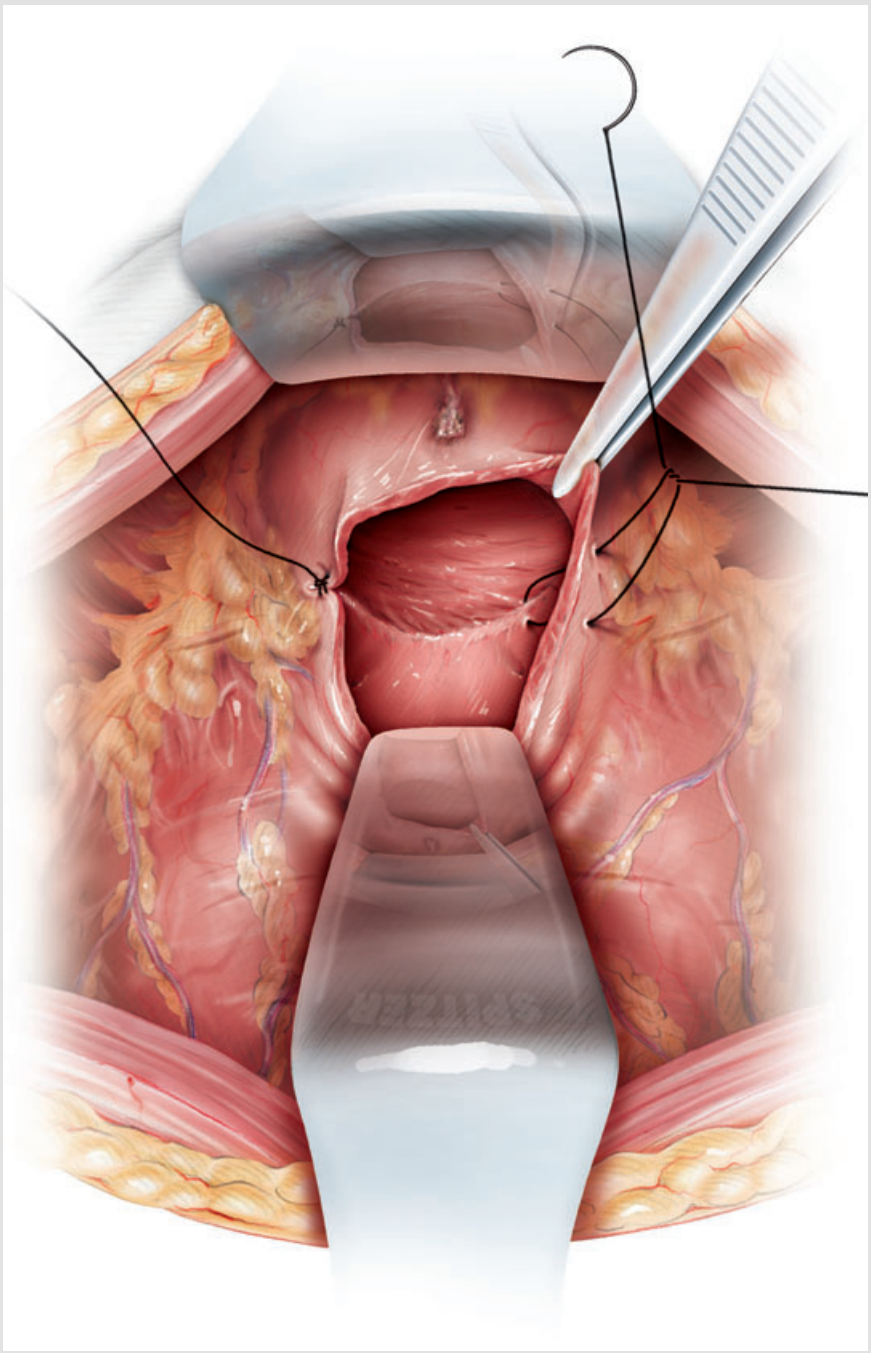

Figure 9

One of these is then run continuously across the capsule to the opposite suture, to which it is tied.

A size 22 Foley Haematiana artheat is inserted into the bladder and 30ml of fluid first filled into the balloon. A Robinson drain is used to drain the retropubic space. The wound is then closed. The catheter may be left in the bladder for 3 to 4 days and removed before the patient leaves hospital on the fifth post-operative day.