

BLADDER NECK - URETHRAL ANASTOMOSIS AFTER LAPAROSCOPIC EXTRAPERITONEAL RADICAL PROSTATECTOMY: TECHNICAL DETAILS AFTER 200 PROCEDURES

Martina G.¹, Lovisolo J.A.², Giumelli P.L.¹, Seuzzarella S.¹, Remotti M.¹, Giacomo C.¹

¹Ospedale di Sondalo, Department of Urology, Sondalo, Italy, ²Ospedale Galmarini, Department of Urology, Tradate, Italy

INTRODUCTION & OBJECTIVES: The urethral anastomosis is a fundamental part of the success of any radical prostatectomy. This step is very technically demanding when performed laparoscopically and must be done when the surgeon is physically and mentally fatigued. In order to save time and to help ensure success, the surgeon should follow a standardized procedure. In this video we present the technique which we have adopted based on our experience in over 200 laparoscopic extraperitoneal radical prostatectomies.

MATERIAL & METHODS: The anastomosis is created by placing 6 interrupted stitches using reabsorbable 3/0 monofilament material.

The first stitch is placed with the right hand at the 5 o'clock position starting from outside to inside the bladder and then inside to outside the urethra. The knot should be tied laterally to the urethra. A counterclockwise winding motion of the needle holder around the thread while forming the knot assures the the creation of a flat surgeon's knot.

The second stitch is placed at 7 o'clock from outside to inside the bladder and then inside to outside the urethra. The left hand is used for the bladder and the right is used for the urethra. The proper distance between the first and second stitches is important in order to form a good posterior urethral plate and to guarantee watertightness.

The third stitch is placed at 9 o'clock. With the left hand the needle is passed from outside to inside the bladder and then, a right hand backhand stitch is passed from inside to outside the urethra. Alternatively, this stitch can be placed completely with the right hand from outside to inside the urethra and then from inside to outside the bladder. This method tends to place the stitch more posteriorly and is preferable when the posterior urethra seems weak.

The fourth stitch is placed at 3 o'clock starting with the right hand outside to inside the bladder and then left backhand inside to outside the urethra. The alternative to the 3 o'clock stitch is outside to inside the urethra and then inside to outside the bladder using the left hand needle driver.

The fifth stitch is placed with the right hand at 11 o'clock from outside to inside the urethra and then inside to outside the bladder. Care must be taken at this point not to grab the catheter with the needle.

The last stitch is placed at 1 o'clock from outside to inside the urethra and then inside to outside the bladder with the left hand. This same stitch can be used to create an anterior racket suture in the case of an overabundant bladder neck.

After completion of the anastomosis, the bladder is filled with 50 to 100 cc's of saline to check the watertightness of the junction.

CONCLUSIONS: This procedure has allowed us to successfully create the bladder neck - urethral anastomosis in more than 200 laparoscopic extraperitoneal radical prostatectomies.