# HOW I DO IT

# Maneuver to improve exposure during radical perineal prostatectomy

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**Objectives:** Radical perineal prostatectomy (RPP) has an important place as a management option for prostate cancer. Herein we describe an adaptation that we found to significantly help the exposure during this procedure.

**Methods:** After opening the urethra, the long Lowsley tractor is changed to the short tractor. Caudal traction facilitates the dissection up to the bladder neck, which is opened. Classically, at this point an umbilical tape or Penrose drain substitutes the short tractor. Because of the

#### Introduction

Many studies that compared the retropubic and perineal approaches for radical prostatectomy over the past 8 years concluded that both techniques offered equivalent clinical results regarding surgical margins, biochemical

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Address correspondence to Dr. Nabil K. Bissada, MD, Department of Urology, UAMS, Slot 540, Little Rock, AR 72205 USA limitation in the amount of traction that can be applied without fracturing through the tissue, we have utilized traction sutures placed in both right and left lobes of the prostate instead of the Penrose drain.

**Results:** Traction on these sutures resulted in excellent exposure and greatly facilitated the posterior dissection of the prostate as well as seminal vesicles dissection.

**Conclusions:** This small addition to the standard technique of RPP helps with complete dissection of the prostate and seminal vesicles. We recommend replacing the traditional Penrose traction with these sutures placed in the lateral lobes of the prostate.

**Key Words:** radical, prostatectomy, perineal, surgical technique

recurrence, impotence and incontinence rates. Several studies suggested that radical perineal prostatectomy (RPP) may be less invasive and is associated with decreased blood loss since it avoids the dorsal venous complex. It may be associated with decreased operative time, postoperative pain and overall hospital stay.<sup>1-5</sup> Radical perineal prostatectomy was reported to be 42% more cost effective than radical retropubic prostatectomy (RRP).<sup>6</sup> It has an easier learning curve and lower operating room costs compared to laparoscopic and robotic approaches.<sup>2</sup> Herein we describe a simple maneuver to improve exposure during RPP.



Figure 1. Completed right traction suture.

### Technique

Initial parts of the procedure are performed according to the surgeon's preference and are well described in the literature.<sup>7</sup> The membranous urethra is incised over the Lowsley tractor at its junction with the prostatic apex. The long Lowsley tractor is replaced by a straight Lowsley tractor passed through the open urethral end of the prostate into the bladder and the wings are opened. The remaining anterior aspect of the urethra is transected from the prostate apex. Gentle traction is applied to provide better visualization of the prostate. Dissection is done from the prostatic apex to the bladder neck. Traditionally, when the bladder neck is opened the straight Lowsley tractor is replaced by an umbilical tape, a small Penrose drain or a small rubber catheter and then traction is applied as necessary. However excessive traction on the Penrose drain or rubber catheter can result in cutting through the thin anterior tissues. Instead, we apply traction sutures to the prostate. We apply a deep number one chromic suture on a large tapered rounded needle which is passed through the right lobe of the prostate. Traction on the suture allows passing the needle deeper to the first pass and in turn traction on this figure of eight suture allows an additional bite deeper to the first two passes. The two ends of the suture are then held with a hemostat, Figure 1. A similar traction suture is utilized to apply

traction to the left lobe. Traction on these two sutures almost always provides excellent exposure to complete the dissection. We have consistently observed that the exposure provided by traction on these sutures is significantly superior to that provided by traction on the Penrose drain or rubber catheter. With adequate traction provided by these traction sutures, the dissection is continued to mobilize the prostate, the ampulla of the vas deferens and the seminal vesicle on each side, which all are made easier with the use of the prostatic traction sutures. The specimen is removed. The rest of the procedure is completed as usual.

#### Discussion

Radical perineal prostatectomy has several advantages when compared with RRP. It results in equivalent tumor control, avoids the division of the deep dorsal veins with its potential for significant blood loss,8 and provides excellent urethrovesical anastomosis and rapid convalescence. A multi institutional longitudinal study from Japan demonstrated that all the approaches to radical prostatectomy including laparoscopic, retropubic and perineal, are equivalent regarding the quality of life when performed by experienced surgeons.<sup>9</sup> The experience of the surgeon plays an important role as studies have shown a decrease in the operative time and in total blood loss in RPP.<sup>2</sup> We have found that traction sutures as described here substantially improve the exposure of the prostate during important parts of the procedure. The sutures remain in the specimen and the pathologist processes the tissue in a standard fashion. We have not noticed any difficulty with pathologic examination or determination of the surgical margins during more than 12 years of its utilization.

## Conclusion

Radical perineal prostatectomy remains an important option in the treatment of localized prostate cancer. We have noted significant improvement in exposure with the use of the traction sutures described here. We believe the improvement in exposure with this simple addition is worth consideration by surgeons performing RPP.

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