Re: Perineal Approach for Artificial Urinary Sphincter Implantation Appears to Control Male Stress Incontinence Better Than the Transscrotal Approach

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To the Editor: Henry et al concluded that perineal cuff placement results in better continence than the transscrotal approach. This information is of obvious clinical importance, since inferior continence control would nullify the advantages of the scrotal approach, namely supine positioning, single incision and speed of the procedure.

As coauthor of the 2003 article introducing the scrotal approach I submit that, as in many surgical procedures, there is a learning curve with this technique and the more experienced surgeons will find that although the incision is scrotal, the cuff is actually placed in the perineum around the bulbar urethra. If done properly, the cuff placement should not be much distal to the level of placement obtained in a classic perineal approach. Placing the cuff at the level of the scrotal urethra, at the level where one would make a corporotomy incision for transscrotal implantation of an inflatable penile prosthesis, is incorrect and may be responsible for the poorer continence outcomes in this study.

There are 2 key technical steps in ensuring proximal urethral cuff placement. The first is passage of a Metzenbaum scissors along the outside of the corpora until the ischiopubic ramus is encountered. The sensation is similar to that obtained in the placement of a penile implant, when a dilator is passed into the proximal corpora. The Metz is spread and a small space is created. The contralateral side is approached similarly, and Deaver retractors are placed in the spaces created and pulled caudad. The second critical maneuver is the complete release of the septum running between the scrotum and the urethra, which is facilitated by the aforementioned dissection and retraction. These 2 steps will result in exposure of a mobile section of the proximal urethra. The techniques are well demonstrated on the instructional video by Wilson.

For any male urologist who doubts that you can get a good perineal seating of a cuff via a scrotal approach I suggest lying supine and examining yourself. Place the index finger of your left hand on the bulbar urethra via the perineum and place the index finger of your right hand on the scrotal urethra, and feel how easy it is to join up the 2 fingers.

I have not seen any meaningful difference in the continence outcomes with the scrotal vs the perineal approach, and perhaps the answer is the difference in surgical technique—placing the cuff proximally is imperative, and transscrotal only refers to the incision and not the level of cuff placement. Nonetheless, this article raises important questions that can be addressed only by long-term studies, and I am intrigued by the reference in the article to the single incision perineal approach.

Respectfully,

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Reply by Authors: Siegel brings up many good points. The transscrotal approach for implantation of the artificial urinary sphincter (AUS) cuff is faster and easier than the perineal approach for most urologists. Moreover, as we are coauthors of the 2003
Journal article introducing the scrotal approach, we agree that there is a learning curve to this new surgical approach. The 2 key technical steps described by Siegel are indeed important for proximal urethral cuff placement and the instructional video by Wilson is excellent.

Nevertheless, the results in this cohort of patients, treated by the first practice to publish this technique, appear to demonstrate an advantage to the perineal approach in terms of completely dry rates and infection/erosion rates. Advocates of the transscrotal approach claim they are placing the AUS cuff in the same location as with the perineal approach and achieving similar incontinence rates in their patients but clearly there is appropriate debate as to the exact location achieved. Since the current findings were evaluated a multicenter study group has been formed, which has obtained much larger patient numbers and a longer followup. In addition, we are comparing differing cuff sizes placed with each approach, and plan to submit our findings to The Journal of Urology® in the near future. Comparing cuff sizes used via each approach gives an approximation of where along the urethra the cuff is being placed.

New product enhancements could prove helpful to the prosthetic urologist in performing AUS via either approach. A new 3.5 cm cuff may become available for AUS implantation in the next 6 to 24 months. Often when placing an AUS via a transscrotal approach the urethra is much thinner than the inside diameter of a 4.0 cm cuff. Therefore, using a 3.5 cm cuff in these cases could improve continence rates. More importantly, antibiotic coating of the AUS has been available for more than a year now and it could reduce infection/erosion rates similarly to reduced infection rates in inflatable penile prostheses (approximately 50% reduction). A multicenter study group has formed to follow AUS treated patients prospectively during the long term, with the primary focus being infection/erosion rates. We are also following continence rates as a secondary end point and will be comparing the 2 approaches in this regard.

The single incision perineal approach is now our preferred approach for most cases. Placing the pump in a subdartos pouch in the scrotum from below, the exact opposite of what is done in the transscrotal approach, gives the surgeon more accurate pump placement and appears to avoid high riding pump complications. The pressure regulating balloon placement is similar to blind reservoir placement of an inflatable penile prosthesis, with the trick being to put the patient in the reverse Trendelenburg position to tilt the pelvis toward the surgeon. A video and an abstract demonstrating these aspects are currently being prepared for peer reviewed submissions.


Re: Single Port Transumbilical (E-NOTES) Donor Nephrectomy


To the Editor: I wish to congratulate Gill et al for their recent report on 4 successful donor nephrectomies via a single port transumbilical approach. With single incision laparoscopic surgery (SILS) still in its infancy (fewer than 75 published cases reported for all indications) it is commendable that these authors have extended this minimally invasive innovation into the realm of kidney donation. As clinical experience with SILS increases, I believe it is imperative to evaluate critically 2 important questions. First, does SILS compromise current standards of surgical care? Also, what is the true objective benefit of SILS—decreased morbidity, improved cosmesis, both or neither?

In regard to the first question, it appears that for experienced laparoscopic surgeons SILS nephrectomy can be safely and successfully performed without compromising surgical outcomes. Gill et al report a median operative duration of 3.3 hours, estimated blood loss of 50 cc and no intraoperative complications. We recently completed a case-control comparison between SILS and conventional laparoscopic nephrectomy with respect to perioperative outcomes and short-term measures of convalescence. In that study of 33 successfully completed cases (SILS in 11 and conventional laparoscopy in 22) we found no differences in median operative time (122 vs 125 minutes, p = 0.78), percent decrease from preoperative hemoglobin (14.1% vs 15.8%, p = 0.52), complication rate (0% for both) or surgical margin status between the 2 approaches. Thus, at least from this preliminary experience, it appears that SILS maintains current standards of surgical care.

When considering the second question, regarding the true objective benefit of SILS, the landscape is murkier. With regard to morbidity and convalescence, preliminary findings suggest that morbidity associated with SILS nephrectomy may