The use of a lighted stent as a method for identifying the urethra in male patients undergoing transanal total mesorectal excision: a video demonstration

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The application of transanal minimally invasive surgery (TAMIS) for total mesorectal excision (TME) has undergone rapid adoption by expert colorectal surgeons worldwide [1]. It represents one of the most important new techniques for the management of distal rectal cancer [2]. However, the unique approach from below is unfamiliar to rectal cancer surgeons and mandates appropriate training and education. Even with adequate training, there is a risk of urethral injury with TAMIS-TME [3].

This video demonstrates how the male urethra can be injured during transanal TME and then describes a simple method for identifying the urethra. On a cadaveric model, a clear 24 Fr Foley catheter is introduced into the bladder. Through the Foley, a lighted ureteral stent is placed into the Foley and secured in place. Next, transanal TME trainees are instructed to attempt to injure the urethra with the aim of identifying the urethra prior to transection by identifying the lighted stent. Under normal laparoscopic light, the stent was not visible, but when the light source was toggled to OFF, the lighted stent (within the urethra) was clearly visible.

In summary, this video demonstrates that the use of a lighted stent within a clear Foley catheter can help

visualize the urethra and may prevent inadvertent injury during transanal TME.

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Conflict of interest None.

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