The transrectal single-port laparoscopic radical prostatectomy in a cadaver model

Transrektal single port laparoskopik radikal prostatektomi kadavra modeli

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Radical prostatectomy is the most commonly used and most effective treatment for localized prostate cancer; however, this treatment modality is not without disadvantages. After describing the first technique of radical perineal prostatectomy, several techniques, including open, laparoscopic, and robotic retropubic radical prostatectomy were developed and preferred in the treatment of patients. The desire for reproducible, minimally invasive surgery, which reduces complication rates and maximizes cosmetic outcomes, is met by natural orifice transluminal endoscopic surgery (NOTES).[1] Akça et al.[2] revealed that radical prostatectomy may be performed using a transrectal NOTES route. The authors state that transrectal radical prostatectomy is technically feasible in the cadaver model and the transrectal NOTES route provides good exposure and easy access to the posterior surface of the prostate.

Anatomy dissection studies using human cadavers are valuable to show surgeons exactly what is intended for them to see without the risk of disrupting the integrity of the cadaver.[3] We would like to congratulate the authors for an ethical cadaver study of a new treatment modality and for finding a cost-effective model to explore the feasibility of the technique.

Rectal injury or rectal perforation is one of the most important complications in radical prostatectomy, and the frequency of this complication varies from 0% to 11% in the literature.[4] Additionally, a recent study showed that rectal perforation is an important cause of litigation in cases of radical prostatectomy in the United States of America, and this complication represents 40 % of all cases of negligence in the performance of radical prostatectomy surgery.[5] Even though the authors state that a meticulous repair of rectal mucosa makes this procedure less morbid than an inadvertent unrecognized rectal injury, a living human study may show that prolonged retraction on the rectal wall in the single port procedures can damage the viability of rectal tissue. Opening the gastrointestinal system can cause several complications, including sepsis and even death. Thus, concerning the motto 'primum nil nocere', an innovative technique should be experienced by using fundamental anatomical principles.

Humphreys et al.[6] introduced another innovative surgical technique called NOTES radical prostatectomy for localized prostate cancer via a transurethral approach. This technique has the same advantages as transrectal NOTES radical prostatectomy, such as minimal invasiviness and improved cosmetic outcomes, with the lack of potential risks seen rectal injury.

Nevertheless, the study by Akça et al.[2] is noteworthy, important, and will guide researchers in finding the best type of approach for radical prostatectomy surgery.

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Submitted: 02.07.2015

Accepted: 29.07.2015

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