

38. BÖLÜM

ÜROLOJİDE MINİMAL İNVAZİV CERRAHİLER

Doğuakan SÖKMEN¹

Giriş

Yüzyıllardır süregelen teknolojik gelişmeler her alanda olduğu gibi tıp ve medikal sektörde de etkisini gösterdi. Özellikle son 2 dekatta üroloji alanında kazanmış olduğu ivmenin gerek diyagnostik gerek terapötik pozitif etkileri yadsınamaz boyutlardadır. Bu bölümde ürolojik hastalıklarda minimal invaziv cerrahi denildiğinde bu gelişmeden en sık yararlandığımız tanısal yöntemlerden ve operasyon tekniklerinden bahsedilecektir.

Hepimizin bildiği gibi ürolojide taş hastalıkları, onkolojik hastalıklar, alt üriner sistem cerrahileri ve rekonstriktif cerrahiler minimal invaziv tedavi arayış çabalarının en önde geldiği alt başlıklarıdır.

Taş hastalığında minimal invaziv ürolojik girişimler

Ürolithiasis asırlardır insanlık tarihinde yer alan ciddi bir ürolojik patolojidir. Hastaların sık sık ağrı, enfeksiyon ve cerrahi girişim geçirdiği bu hastalık grubunda minimal invaziv girişimlerin etkisi bir nebze de olsa hastaların ve ürologların elini güçlendirmiştir. Son yıllarda ürolojide lazer kullanımının klinik pratikte yeri artmasıyla beraber gelişmiş fiberoptik üreteroskoplar (URS, RIRC) ve çapı kü-

¹ Uzman doktor, Memorial Bahçelievler Hastanesi, d.sokmen@hotmail.com

KAYNAKÇA

1. Lopes T, Sangam K, Alken P, et al. The Clinical Research Office of the Endourological Society Percutaneous Nephrolithotomy Global Study: tract dilation comparisons in 5537 patients. Clinical Research Office of The Endourological Society Percutaneous Nephrolithotomy Study Group. *J Endourol.* 2011; 25: 755-762.
2. de la Rosette J, Assimos D, Desai M, et al. The Clinical Research Office of the Endourological Society Percutaneous Nephrolithotomy Global Study: indications, complications, and outcomes in 5803 patients.; CROES PCNL Study Group. *J Endourol.* 2011; 25: 11-17.
3. Türk C, Knoll T, Petrik A, et al. Guidelines on urolithiasis [Internet]. Anheim (NL): Europe—an Association of Urology; c2014 [cited 2015 Jan 5]. Available from: http://uroweb.org/wp-content/uploads/22-Urolithiasis_LR.pdf.
4. Huffman JL, Bagley DH, Lyon ES. Extending cystoscopic techniques into the ureter and renal pelvis. Experience with ureteroscopy and pyeloscopy. *JAMA* 1983; 250: 2002-2005.
5. Grasso M, Conlin M, Bagley D. Retrograde ureteropyeloscopic treatment of 2 cm or greater upper urinary tract and minor staghorn calculi. *J Urol* 1998; 160: 346-351.
6. Ho CC, Hee TG, Hong GE, Singam P, Bahadzor B, Md Zainuddin Z. Outcomes and Safety of Retrograde Intra-Renal Surgery for Renal Stones Less Than 2 cm in Size. *Nephrourol Mon* 2012;4: 454-7.
7. Breda A, Ogunyemi O, Leppert JT, Lam JS, Schulam PG. Flexible ureteroscopy and laser lithotripsy for single intrarenal stones 2 cm or greater--is this the new frontier? *J Urol* 2008;179:981-4.
8. Akman T, Binbay M, Ugurlu M, Kaba M, Akcay M, Yazici O, et al. Outcomes of retrograde intrarenal surgery compared with percutaneous nephrolithotomy in elderly patients with moderate-size kidney stones: a matched-pair analysis. *J Endourol* 2012;26:625-9.
9. Binder J, Kramer W. Robotically assisted laparoscopic radical prostatectomy. *BJU Int* 2001;87:408-10.
10. Zorn KC, Gofrit ON, Orvieto MA, Mikhail AA, Zagaja GP, Shalhav AL. Robotic-assisted laparoscopic prostatectomy: functional and pathologic outcomes with interfascia
11. Patel VR, Palmer KJ, Coughlin G, Samavedi S. Robot-assisted laparoscopic radical prostatectomy: perioperative outcomes of 1,500 cases. *J Endourol* 2008;22:2299-305.
12. Ahlering TE, Skarecky D, Borin J. Impact of cautery versus cautery-free preservation of neurovascular bundles on early return of potency. *J Endourol* 2006;20:586-9.
13. Chien GW, Mikhail AA, Orvieto MA, Zagaja GP, Sokoloff MH, Brendler CB, et al. Modified clipless antegrade nerve preservation in robotic-assisted laparoscopic radical prostatectomy with validated sexual function evaluation. *Urology* 2005;66:419-23.
14. Beecken WD, Wolfram M, Engl T, Bentas W, Probst M, Blaheta R, et al. Robotic-assisted laparoscopic radical cystectomy and intra-abdominal formation of an orthotopic ileal neobladder. *Eur Urol* 2003;44:337-9.
15. Balaji KC, Yohannes P, McBride CL, Oleynikov D, Hemstreet GP. Feasibility of robot-assisted totally intracorporeal laparoscopic ileal conduit urinary diversion: initial results of a single institutional pilot study. *Urology* 2004;63:51-5.

16. Shah NL, Hemal AK, Menon M. Robot-assisted radical cystectomy and urinary diversion. *Curr Urol Rep* 2005;6:122-5.
17. Rhee JJ, Lebeau S, Smolkin M, Theodorescu D. Radical cystectomy with ileal conduit diversion: early prospective evaluation of the impact of robotic assistance. *BJU Int* 2006;98:1059-63.
18. Ho H, Schwentner C, Neururer R, Steiner H, Bartsch G, Peschel R. Robotic-assisted laparoscopic partial nephrectomy: surgical technique and clinical outcomes at 1 year. *BJU Int* 2009;103:663-8.
19. Bhayani SB, Das N. Robotic assisted laparoscopic partial nephrectomy for suspected renal cell carcinoma: retrospective review of surgical outcomes of 35 cases. *BMC Surg* 2008;8:16.
20. Lourenco T, Pickard R, Vale L. Alternative approaches to endoscopic ablation for benign enlargement of the prostate: systematic review of randomised controlled trials. *BMJ* 2008;337:a449
21. Hermann TR, Liatsikos E, Nagele U, et al. Guidelines of lasers and Technologies. *Eur Urol* 2012 Jan 17.
22. Herrmann TR, Bach T, Imkamp F, et al. Thulium laser enucleation of the prostate (ThuLEP): transurethral anatomical prostatectomy with laser support. Introduction of a novel technique for the treatment of benign prostatic obstruction. *World J Urol* 2010;28:45-51.
23. Gettman MT, Peschel R, Neururer R, Bartsch G. Laparoscopic pyeloplasty: comparison of procedures performed with the daVinci robotic system versus standard techniques. *Eur Urol* 2002;42:453-8.
24. Tuğcu V, Şener NC, Şahin S, Yavuzsan AH, Akbay FG, Apaydın S. Robotic kidney transplantation: The Bakirkoy experience. *Turk J Urol*. 2016 Dec;42(4):295-298.