

Bölüm 3.2.6.1

RADİKAL PROSTATEKTOMİ SONRASI SEKSÜEL KOMPLİKASYONLAR

Halil Lütfi CANAT¹
Emre KORKMAZ²

|GİRİŞ

Prostat kanseri günümüzde erkeklerde en sık görülen solid organ kanseri olarak karşımıza çıkmaktadır. Dünya’da 2020 yılında 1.414.259 prostat kanseri tanısı konmuştur ve insidansı gün geçtikçe artmakta olup, tanı yaşı düşmektedir(1). Tanı yaşının düşmesiyle birlikte, prostat kanseri tedavi yöntemlerinin getirdiği komplikasyonlardan biri olan cinsel işlev bozuklukları ve tedavileri önem kazanmaktadır.

Cinsel işlev bozuklukları; erektil disfonksiyon(ED), anejekulasyon, anorgazmi ve libido kaybını kapsamaktadır. ED insidansı çalışmadan çalışmaya değişmekte olup, hastanın yaşı, prostat kanseri tedavisinden önceki cinsel işlevsellik durumu, diğer tıbbi hastalıklar, operasyonun uygulama şekli ve cerrahın deneyimine bağlıdır.

|SEKSÜEL KOMPLİKASYONLARLA İLİŞKİLİ PELVİK ANATOMİ

Erkeklerin yaklaşık %70’inde penis dolaşımının hem internal pudendal arter hem de aksesuar arterlerden kaynaklandığı düşünülürken, yaklaşık %15’inde dolaşımın tamamı ya internal pudendal ya da aksesuar arterlerden köken alır.

¹ Doç. Dr., Başakşehir Çam ve Sakura Şehir Hastanesi, Üroloji Kliniği, drhlcanat@gmail.com

² Dr., Başakşehir Çam ve Sakura Şehir Hastanesi, Üroloji Kliniği korkmazemre@gmail.com

KAYNAKLAR

1. Siegel RL, Miller KD, Fuchs HE, Jemal A. Cancer statistics, 2022. *CA: A Cancer Journal for Clinicians*. 2022;72(1):7–33.
2. Polascik TJ, Walsh PC. Radical retropubic prostatectomy: The influence of accessory pudendal arteries therecovery of sexual function. *Journal of Urology*.1995;154(1):150–2.
3. Rogers CG, Khan MA, Craig Miller M, Veltri RW, Partin AW. Natural history of disease progression in patients who fail to achieve an undetectable prostate-specific antigen level after undergoing radical prostatectomy. *Cancer*.2004;101(11):2549–56.
4. Walsh PC, Donker PJ. Impotence Following Radical prostatectomy: Insight into etiology and Prevention. *Journal of Urology*.1982;128(3):492–7.
5. Takenaka atsushi, Murakami gen, Sogahideo, Hanseung-Ho, Araiyoichi, Fujisawamasato. Anatomical analysis of the neurovascular bundle supplying penile cavernous tissue to ensure a reliable nerve graft after radical prostatectomy. *Journal of Urology*.2004;172(3):1032–5.
6. Takenaka A, Hara R, Soga H, Murakami G, Fujisawa M. Anovel technique for approaching the endo pelvic fascia in retro pubic radical prostatectomy, basedonananatomicalstudyoffixe-dandfreshcadavers. *BJU International*. 2005;95(6):766–71.
7. Ayajkik, Todan, Okamurat. Nitroxidergic (nitregeric) nerve and erectile dysfunction. *Folia Pharmacologica Japonica*.2002;119(1):21–8.
8. Rubiojosé, Hernándezmedardo, Arcosluisrivera, Martínezacristina, García-Sacristánalbino, Prietodolores. Mechanisms of prostaglandin E-induced relaxationin penile resistance arteries. *Journal of Urology*. 2004;171(2):968–73.
9. Shinn-Nan Lin J, Lin Y-M, JouY-C, Cheng J-T. Role of cyclicadenosinemonophosphateinprostaglandine(1)-Induced penile erection in rabbits. *European Urology*.1995;28(3):259–65.
10. Lunacek A, Schwentner C, Fritsch H, Bartsch G, Strasser H. Anatomical radical retro pubic prostatectomy: ‘curtain dissection’ of the neurovascular bundle. *BJU International*. 2005;95(9):1226–31.
11. Patel VR, Schatloff O, Chauhan S, Sivaraman A, Valero R, Coelho RF, etal. The role of the prostatic vasculature asa landmark for nerves paring during robot-assisted radical prostatectomy. *European Urology*.2012;61(3):571–6.
12. Vander Wielen GJ, Mulhall JP, IncrocciL. Erectile dysfunction after radiotherapy for prostate cancer and radiation dose to the penile structures: a critical review.; *Radiother Oncol*.2007;84:107–113
13. Ficarra V, Novara G, Ahlering TE, Costello A, Eastham JA, Graefen M, et al. Systematic Review and meta-analysis of studies reporting potency rates after robot-assisted radical prostatectomy. *European Urology*. 2012;62(3):418–30.
14. Carlsson S, Drevin L, Loeb S, Widmark A, Lissbrant IF, Robinson D, et al. Population-based study of long-term functional outcomes after prostate cancer treatment. *BJU International*.2015;117(6B).
15. Jenkins LC, Mulhall JP. The new business of Ed Therapy. *The Journal of Sexual Medicine*.2015;12(12):2223–5.
16. Le JD, Cooperberg MR, Sadetsky N, Hittelman AB, Meng MV, Cowan JE, et al. Changes in specific domains of sexual function and sexual bother after radical prostatectomy.*BJU International*.2010;106(7):1022–9.
17. Woo SH, Kang DI, HaY-S, Salmasi AH, Kim JH, Lee D-H, etal. Comprehensive analysis of sexual function outcome in prostate cancer patients after robot-assisted radical prostatectomy. *Journal of Endourology*.2014;28(2):172–7.
18. Köhler TS, Pedro R, Hendlin K, Utz W, Ugarte R, Reddy P, et al. A pilot study on the early use of the vacuum erection device after radical retro pubic prostatectomy. *BJU International*. 2007;100(4):858–62.
19. Porst H, Roehrborn CG, Secrest RJ, Esler A, Viktrup L. Effects of tadalafilon lower urinary tract symptoms secondary to benign prostatic hyperplasia andon erectile dys function in

- sexually active men with both conditions: analyses of pooled data from four randomized, placebo-controlled tadalafil clinical studies. *J Sex Med.* 2013 Aug;10(8):2044-52.
20. Padma-Nathan H, Mc Cullough AR, Levine LA, Lipshultz LI, Siegel R, Montorsi F, et al. Randomized, double-blind, placebo-controlled study of postoperative nightly sildenafil citrate for the prevention of erectile dysfunction after bilateral nerve-sparing radical prostatectomy. *Int J Impot Res* 2008;20:479-86.
 21. Schwartz EJ, Wong P, Graydon RJ. Sildenafil preserves intracorporeal smooth muscle after radical retro pubic prostatectomy. *J Urol* 2004;171:771-4
 22. Kimura Y, Honda M, Teraoka S, Yumioka T, Iwamoto H, Morizane S, Hikita K, Takenaka A. Impact of penile rehabilitation with phosphodiesterase-5 inhibitor on recovery of erectile function in patients under going robot-assisted radical prostatectomy: A propensity score-matched analysis. *Int J Urol.* 2021 Jun;28(6):637-642.
 23. Peterson CA, Bennett AH, Hellstrom WJ, Kaiser FE, Morley JE, Nemo KJ, Padma-Nathan H, Place VA, Prendergast JJ, Tam PY, Tanagho EA, Todd LK, Varady JC, Gesundheit N. Erectile response to transurethral alprostadil, prazosin and alprostadil-prazosin combinations. *J Urol.* 1998 May;159(5):1523-7;discussion 1527-8.
 24. Rho BY, Kim SH, Ryu JK, Kang DH, Kim JW, Chung DY. Efficacy of Low-Intensity Extracorporeal Shock Wave Treatment in Erectile Dysfunction Following Radical Prostatectomy: A Systematic Review and Meta-Analysis. *J Clin Med.* 2022 May 14;11(10):2775.
 25. Tal R, Jacks LM, Elkin E, Mulhall JP. Penile implant utilization following treatment for prostate cancer: Analysis of the seer-medicare database. *The Journal of Sexual Medicine.* 2011;8(6):1797-804.
 26. Bajic P, Patel PM, Nelson MH, Dornbier RA, Kirshenbaum EJ, Baker MS, Farooq AV, Mc Vary KT, Gupta GN, Bresler L. Penile Prosthesis Implantation and Timing Disparities After Radical Prostatectomy: Results From a Statewide Claims Database. *J Sex Med.* 2020 Jun;17(6):1175-1181.
 27. Dave CN, Kohn TP, Patel HD, Arafa A, Burnett AL. Inflatable penile prosthesis outcomes after pelvic radiation. *Can J Urol.* 2020 Oct;27(5):10382-10387.
 28. Levine LA, Hoeh MP. Review of penile prosthetic reservoir: Complications and presentation of a modified reservoir placement technique. *J Sex Med* 2012;9:2759-2769.
 29. Bochinski D, Lin GT, Nunes L, et al. The effect of neural embryonic stem cell therapy in a rat model of cavernosal nerve injury. *BJU Int.* 2004;94:904-9.
 30. Albersen M, Fandel TM, Lin G, et al. Injections of adipose tissue derived stem cells and stem cell lysate improve recovery of erectile function in a rat model of cavernous nerve injury. *J Sex Med.* 2010;7:3331-40.