

## 9. BÖLÜM

### *Akut ve Kronik Epididimoorşit*

Kamil Gökhan ŞEKER<sup>1</sup>  
Nadir KALFAZADE<sup>2</sup>

#### Epididimit

##### Tanım ve Sınıflandırma

Epididimit; epididimin bakteriyel, nonbakteriyel enfeksiyöz ajanlar ve nonenfeksiyöz nedenlere bağlı gelişen enflamasyonudur. (1) En sık görülen intraskrotal enflamatuar hastalık (2)

Epididimit temelde akut ve kronik olarak sınıflandırılır. Akut epididimit birkaç gün içerisinde ani olarak ortaya çıkan ağrı ve şişlik ile, kronik epididimit ise şişlik olmadan 6 haftadan uzun süren enflamasyon, endürasyon ve ağrı ile prezente olur. (1) Epididimitin gerçek prevalansı bilinmemektedir. Tüm yaş gruplarının da geniş bir yelpazede görülebilir. (3)

##### Etiyoloji ve Patogenez

Epididimit gelişmesindeki bilinen en yaygın teori, üretradan (cinsel yolla bulaşan patojenler) yayılan enfeksiyonlara bağlı olarak lokal genişlemektedir. Bak-

<sup>2</sup> Muş Devlet Hastanesi, Üroloji Servisi, Muş, Türkiye, gkhnseker@hotmail.com

<sup>1</sup> Sağlık Bilimleri Üniversitesi, Bakırköy Dr. Sadi Konuk Eğitim ve Araştırma Hastanesi, Üroloji Kliniği, İstanbul, Türkiye, nadirkalfazade@gmail.com

## Kaynaklar

1. Berger RE, Lee JC. (2002). Epididymitis. In: Walsh PC, Retik AB, Vaughan ED, Wein AJ (Eds.), *Campbell's Urology*. (8<sup>th</sup> ed, pp. 678- 680). Philadelphia: WB Saunders.
2. Luzzi GA, O'Brien TS. Acute epididymitis. *BJU Int.* 2001;87(8):747-755. doi:10.1046/j.1464-410x.2001.02216.x.
3. Collins MM, Stafford RS, O'Leary MP, et al. How common is prostatitis? A national survey of physician visits. *J Urol.* 1998; 159(4): 1224 - 1228.
4. Mulcahy FM, Bignell CJ, Rajakumar R, et al. Prevalence of chlamydial infection in acute epididymo-orchitis. *Genitourin Med.* 1987;63(1):16-18. doi:10.1136/sti.63.1.16.
5. Höppner W, Strohmeyer T, Hartmann M, et al. Surgical treatment of acute epididymitis and its underlying diseases. *Eur Urol.* 1992; 22(3): 218-221. doi:10.1159/000474759.
6. Lebovitch, S., & Pontari, M. A. (2007). Prostatitis and lower urinary tract infections in men. In Hanno, P. M., Guzzo, T. J., Malkowicz, S. B., & Wein, A. J. (Eds.). *Penn clinical manual of urology* (pp. 177-188). WB Saunders.
7. Barnes RC, Daifuku R, Roddy RE, et al. Urinary-tract infection in sexually active homosexual men. *Lancet.* 1986;1(8474):171-173. doi:10.1016/s0140-6736(86)90650-1.
8. Holmes KK, Berger RE, Alexander ER. Acute epididymitis: etiology and therapy. *Arch Androl.* 1979;3(4):309-316. doi:10.3109/01485017908988421.
9. Ryan L, Daly P, Cullen I, et al. Epididymo-orchitis caused by enteric organisms in men > 35 years old: beyond fluoroquinolones. *Eur J Clin Microbiol Infect Dis.* 2018;37(6):1001-1008. doi:10.1007/s10096-018-3212-z.
10. Kryger, J. V. (2017). Acute and chronic scrotal swelling. In Kliegman, R. M., Lye, P. S., Bordini, B. J., Toth, H., & Basel, D. (Eds.). *Nelson Pediatric Symptom-Based Diagnosis E-Book.*(p.329) Elsevier Health Sciences.
11. Gkentzis A, Lee L. The aetiology and current management of prepubertal epididymitis. *Ann R Coll Surg Engl.* 2014;96(3):181-183. doi:10.1308/003588414X13814021679311.
12. Somekh E, Gorenstein A, Serour F. Acute epididymitis in boys: evidence of a post-infectious etiology. *J Urol.* 2004;171(1):391-394. doi:10.1097/01.ju.0000102160.55494.1f.
13. Manavi K, Turner K, Scott GR, Stewart LH. Audit on the management of epididymo-orchitis by the Department of Urology in Edinburgh. *Int J STD AIDS.* 2005; 16(5): 386-387. doi: 10.1258/0956462053888853.
14. Redfern TR, English PJ, Baumber CD, McGhie D. The aetiology and management of acute epididymitis. *Br J Surg.* 1984;71(9):703-705. doi:10.1002/bjs.1800710921.
15. Heaton ND, Hogan B, Michell M, et al. Tuberculous epididymo-orchitis: clinical and ultrasound observations. *Br J Urol.* 1989;64(3):305-309. doi:10.1111/j.1464-410x.1989.tb06019.x.
16. Nikolaou M, Ikonomidis I, Lekakis I, et al. Amiodarone-induced epididymitis: a case report and review of the literature. *Int J Cardiol.* 2007;121(1):e15-e16. doi:10.1016/j.ijcard.2007.05.079.
17. National Center for Health Statistics. National Ambulatory Medical Care Survey, 2002. <http://www.cdc.gov/nchs/about/major/ahcd/ahcd1.htm>.
18. Kaver I, Matzkin H, Braf ZF. Epididymo-orchitis: a retrospective study of 121 patients. *J Fam Pract.* 1990;30(5):548-552.

19. Kadish HA, Bolte RG. A retrospective review of pediatric patients with epididymitis, testicular torsion, and torsion of testicular appendages. *Pediatrics*. 1998;102(1 Pt 1): 73- 76. doi:10.1542/peds. 102. 1. 73.
20. McCollough, M., & Rose, E. (2018). Genitourinary and renal tract disorders. In Wal-Is, R., Hockberger, R., & Gausche-Hill, M (Eds.), Rosen's Emergency Medicine: Concepts and Clinical Practice. (9<sup>th</sup> ed., pp. 2163-2181). Philadelphia, PA: Elsevier.
21. Trojian TH, Lishnak TS, Heiman D. Epididymitis and orchitis: an overview. *Am Fam Physician*. 2009;79(7):583-587.
22. Tracy CR, Steers WD, Costabile R. Diagnosis and management of epididymitis. *Urol Clin North Am*. 2008; 35 (1): 101 - vii. doi: 10.1016/j.ucl.2007.09.013.
23. Ferrie BG, Rundle JS. Tuberculous epididymo-orchitis. A review of 20 cases. *Br J Urol*. 1983;55(4):437-439. doi: 10.1111/j.1464-410x. 1983. tb03340. x
24. Yagil Y, Naroditsky I, Milhem J, et al. Role of Doppler ultrasonography in the triage of acute scrotum in the emergency department. *J Ultrasound Med*. 2010; 29(1): 11-21. doi: 10.7863/jum.2010.29.1.11.
25. Workowski KA, Bolan GA; Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015 [published correction appears in MMWR Recomm Rep. 2015 Aug 28;64(33):924]. *MMWR Recomm Rep*. 2015;64(RR-03):1-137.
26. G. Bonkat , R. Bartoletti, F. Bruyère et al. (2020). EAU guidelines on urological infections. European Association of Urology, p. 37.
27. Ludwig M. Diagnosis and therapy of acute prostatitis, epididymitis and orchitis. *Andrologia*. 2008; 40 (2):76- 80. doi:10.1111/j.1439-0272. 2007. 00823.x.
28. Kaya A. (2008). Üretrit, Prostatit, Epididimit, Orşit. In: Topçu AW, Söyletir G, Doga- nay M (eds), *Enfeksiyon Hastalıkları Ve Mikrobiyolojisi*. (Cilt 1. 3. Baskı. Ss 1499-1509). İstanbul. Nobel Tip Kitabevleri.
29. Kulchavanya E, Naber K, Bjerklund Johansen TE. Urogenital tuberculosis: classification, diagnosis and treatment. *European Urology Supplements* 2016;15(4): 112-121
30. Cek M, Lenk S, Naber KG, et al. EAU guidelines for the management of genitourinary tuberculosis. *Eur Urol*. 2005; 48(3): 353-362. doi: 10.1016/j.eururo. 2005. 03. 008.
31. Tracy C.R., & Costabile R.A.(2006). The changing face of epididymitis from 1965 to 2005. Abstract presentation, 53<sup>rd</sup> James C. Kimbrough Urological Seminar, Savannah, GA. January 16, 2006.
32. Lau P, Anderson PA, Giacomantonio JM, Schwarz RD. Acute epididymitis in boys: are antibiotics indicated?. *Br J Urol*. 1997;79(5):797-800. doi:10.1046/j.1464-410x.1997.00129.x.
33. Buttaravoli P., Leffler S. M..(2012). Epididymitis (Chapter 79). In: Buttaravoli, P., & Leffler, S. M. (Eds.), *Minor Emergencies E-Book*. ( 3<sup>th</sup> edition, pp. 301- 305). Elsevier Health Sciences.
34. Nickel JC. Chronic epididymitis: a practical approach to understanding and managing a difficult urologic enigma. *Rev Urol*. 2003;5(4):209-215.
35. Cek M, Sturdza L, Pilatz A. Acute and chronic epididymitis. *European Urology Supplements*. 2017;16(4), 124-131.
36. Mittemeyer BT, Lennox KW, Borski AA. Epididymitis: a review of 610 cases. *J Urol*. 1966;95(3):390-392. doi:10.1016/s0022-5347(17)63468-2.

37. Davis JE.(2016). Male genital problems. In: Tintinalli JE (Ed.), Tintinalli's emergency medicine: a comprehensive study guide (8<sup>th</sup> ed., pp. 601 - 609) New York: McGraw-Hill.
38. Krieger, JN.(2000). Prostatitis, epididymitis and orchitis. In Mandell GL, Bennett JE, Dolin R (Eds.), Principles and practice of infectious diseases (5<sup>th</sup> ed., p. 1243). Philadelphia: Churchill Livingstone.
39. Montari, P. (2020). Inflammatory and Pain Conditions of the Male Genitourinary Tract: Prostatitis and Related Pain Conditions, Orchitis, and Epididymitis. Partin, A. W., Dmochowski, R. R Kavoussi, L. R., & Peters, C. A. (Eds.), *Campbell-Walsh-Wein Urology*. (12<sup>th</sup> ed, pp. 1202- 1223 e8.). Elsevier Health Sciences.
40. McGowan CC, Krieger J. (2015). Prostatitis, Epididymitis, and Orchitis. In: Bennett JE, Dolin R, Blaser MJ (eds), Principles and practice of infectious diseases. (8th ed., pp.1381–1387).Philadelphia: Elsevier Saunders.
41. Masarani M, Wazait H, Dinneen M. Mumps orchitis. *J R Soc Med*. 2006;99(11):573-575. doi:10.1258/jrsm.99.11.573.
42. Pannek J, Haupt G. Orchitis due to vasculitis in autoimmune diseases. *Scand J Rheumatol*. 1997; 26(3): 151 - 154. doi: 10.3109/ 03009749709065674.
43. Silva CA, Cocuzza M, Carvalho JF, et al. Diagnosis and classification of autoimmune orchitis. *Autoimmun Rev*. 2014;13(4-5):431-434. doi:10.1016/j.autrev.2014.01.024.
44. Ibrahim AI, Awad R, Shetty SD, et al. Genito-urinary complications of brucellosis. *Br J Urol*. 1988;61(4):294-298. doi:10.1111/j.1464-410x.1988.tb13960.x.
45. Savascı U, Zor M, Karakas A, et al. Brucellar epididymo-orchitis: a retrospective multicenter study of 28 cases and review of the literature. *Travel Med Infect Dis*. 2014;12(6 Pt A):667-672. doi:10.1016/j.tmaid.2014.10.005.
46. Yadav S, Singh P, Hemal A, et al. Genital tuberculosis: current status of diagnosis and management. *Transl Androl Urol*. 2017;6(2):222-233. doi:10.21037/tau.2016.12.04.
47. Erikci VS, Hoşgör M, Aksoy N, et al. Treatment of acute scrotum in children: 5 years' experience. *Ulus Travma Acil Cerrahi Derg*. 2013;19(4):333-336. doi:10.5505/tjtes.2013.82783.
48. De Paepe ME, Vuletin JC, Lee MH, et al. Testicular atrophy in homosexual AIDS patients: an immune-mediated phenomenon?. *Hum Pathol*. 1989;20(6):572-578. doi:10.1016/0046-8177(89)90246-3.
49. Özsüt H. (2002). Üretrit, prostatit, epididimit ve orşit. Topçu AW, Söyletir G, Doğanay M (editörler). *İnfeksiyon hastalıkları ve mikrobiyolojisi*. (İkinci baskı, p. 1064-70.) İstanbul: Nobel Tıp Kitabevleri.
50. Street EJ, Justice ED, Kopa Z, et al. The 2016 European guideline on the management of epididymo-orchitis [published correction appears in Int J STD AIDS. 2017 Jul;28(8):844]. *Int J STD AIDS*. 2017;28(8):744-749. doi:10.1177/0956462417699356.
51. Colmenero JD, Reguera JM, Martos F, et al. Complications associated with *Brucella melitensis* infection: a study of 530 cases [published correction appears in *Medicine (Baltimore)* 1997 Mar;76(2):139]. *Medicine (Baltimore)*. 1996;75(4):195-211. doi:10.1097/00005792-199607000-00003.
52. Akdemir, Ö.A. (2016). Prostatit, Orşit, Epididimit. Tekgül S., Türkeri L., Esen A., & Alıcı B (Eds.), *Üroloji Masaüstü Başvuru Kitabı* (2.baskı, s. 109-112). Ankara: İris Interaktif.

53. Beacock CJ, Lynch TH, Hughes MA. Fatal tuberculous meningitis complicating tuberculous epididymitis. *Br J Urol.* 1991;67(3):328-329. doi:10.1111/j.1464-410x.1991.tb15149.x.
54. Turunç T, Kuzguncubay B, Turunç T. Epididimoorşit Nedeniyle Başvuran Her Hastada Rutin Brusella Aglutinasyon Testi İstenmeli mi?. *Van Tıp Dergisi* 2010; 17(4), 136-9.
55. Lane TM, Hines J. The management of mumps orchitis. *BJU Int.* 2006;97(1):1-2. doi:10.1111/j.1464-410X.2006.05869.x.
56. Corbel MJ, Elberg SS, Cosivi O. (2006) Brucellosis in humans and animals. Geneva: World Health Organization.
57. Nickel, JC. (2005). Epididymitis. In: Rakel RE, Boppe ET (Eds.), Conn's current therapy (pp. 797- 798). Philadelphia: Elsevier
58. Dejucq N, Jégou B. Viruses in the mammalian male genital tract and their effects on the reproductive system. *Microbiol Mol Biol Rev.* 2001;65(2):208-231. doi:10.1128/MMBR.65.2.208-231.2001.