

7. BÖLÜM

İDRAR YOLU ENFEKSİYONLARI

İşik Melike ÜNLÜKAPLAN¹

GİRİŞ

İdrar yolu enfeksiyonu (İYE) üretradan böbreklere kadar olan üriner sistem organlarının çeşitli mikroorganizmalarca etkilenmesi sonrasında gelişen klinik durumlar için kullanılan genel bir tanımlamadır. Tüm yaş gruplarında sık görülen bir klinik tablo olduğundan acil servislerde de sıkça karşımıza çıkar. Enfeksiyona en sık bakteriler neden olabilmekte ancak mantar, virüs hatta parazitler de nedenler arasında görülebilir. Konakçı savunması azaldığında ya da virulans arttığında patojen mikroorganizma ürotelyuma invaze olur ve belirtiler ortaya çıkar. Çoğu enfeksiyon tablosu hafif klinik tabloyla görülmekle birlikte, enfeksiyon tablosu üst üriner sisteme doğru ilerlerse klinik tablo da ağırlaşabilir (1).

SINIFLANDIRMA

Klinik olarak değerlendirmede sınıflama önem kazanmaktadır. Avrupa Üroloji Derneği'nin 2020'de yayınlanan son güncellemesinde İYE'nin klinik görünümüne, anatomik seviyesine, enfeksiyonun ciddiyet derecesine, risk faktörlerinin sınıflandırılmasına ve uygun antimikrobiyal tedavinin mevcudiyetine dayalı sınıflandırma önermiştir (Tablo 1),(2).

¹ Uzm. Dr. S.B.Ü Haseki E.A.H Acil Tıp Kliniği, melikeunlukaplan@gmail.com

Yatış endikasyonları

Dirençli ağrı, oral alım bozukluğu, belirgin komorbid hastalık, mesane çıkış obstrüksiyonu, hemodinamik instabilite, yaşamı tehdit eden durumlar, yeni tanı glomerulonefrit, preeklampsı, piyelonefrit ve obstruktif nefrolitiazis ile komplike olmuş hematürlili gebe hastalar hastaneye yatırılarak tedavi edilmelidir (50).

KAYNAKLAR

1. Cander, B. (2016) İdrar yolu enfeksiyonları. A. Cüneyt Hocagil (Ed) Acil tip kitabı içinde (s.984-1005). İstanbul: İstanbul kitapevi
2. European Association of Urology 2020. Guidelines on urological infections. (20/12/2020 tarihinde <https://uroweb.org/guideline/urological-infections/> adresinden ulaşılmıştır).
3. Augenbraun MH. (2015) McCormack (Ed). Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, Updated Edition. 8th ed. Philadelphia, PA: Elsevier Saunders; 2015:chap 109
4. Foxman B. Epidemiology of urinary tract infections: incidence, morbidity, and economic costs. Dis Mon. 2003 Feb;49(2):53-70. PubMed PMID: 12601337. Epub 2003/02/26
5. Hooton, T.M., Prevention of recurrent urogenital tract infections in adult women, in EAU/International. Consultation on Urological Infections. T, K.G. Naber, A.J. 2010, Avrupa Üroloji Derneği
6. Fulop, T. Acute Pyelonephritis Workup. 2019 (23/12/2020'de <https://emedicine.medscape.com/article/245559-workup> sayfasından alınmıştır).
7. Bader, MS, leob M, Brooks AA. An update on the management of urinary tract infections in an age of antimicrobial resistance. Postgrad Med, 2017;129: 242.
8. Garibaldi, RA, Burke JB, Dickman ML, Factors predisposing to bacteriuria during indwelling urethral catheterization N Engl J Med, 1974; 291: 215.
9. Hooton, TM, Bradley SF, Cardenes DD, Diagnosis, prevention and treatment of catheter-related urinary tract infection in adults: 2009 International Clinical Practice Guidelines from the Infectious Diseases Society of America Clin Infect Dis, 2010; 50: 625.
10. Dellinger, RP, Levy MM, Rhodes A, Campaign Against Sepsis: international guidelines for severe sepsis and septic shock management, 2012. Intensive Care Med, 2013;39: 165.
11. Singer M, Deutschman CS, Seymour CW Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). JAMA, 2016;315: 801

12. Tandogdu, Z, Bartoletti R, Cai T, Antimicrobial resistance in urosepsis: Results of a 2003-2013 study of infection prevalence (GPIU) in multinational, multicenter global urology. *World J Urol*, 2016;34: 1193.
13. Hotchkiss, RS, Karl IE, Pathophysiology and treatment of sepsis. *N Engl J Med*, 2003;348: 138 Sepsisin patofizyolojisi ve tedavisi. *N Engl J Med*, 2003; 348: 138
14. Brunkhorst, FM, Wegscheider K , Forycki ZF, Procalcitonin for early diagnosis and differentiation of SIRS, sepsis, severe sepsis and septic shock. *Intensive Care Med*, 2000;26 Suppl 2: S148.
15. Mikkelsen, ME, Miltiades AN, Gaiesti DF, Serum lactate is associated with death in severe sepsis, independent of organ failure and shock. *Crit Care Med*, 2009;37: 1670.
16. Altay M, Duranay M Amfizematöz piyelonefrit Dahiliye kliniği, s.b. ankar a eğitim ve araştırma hastanesi, Ankara Turkiye klinikleri j med sci. 2004;24(6):661-3
17. Türk A, Selimoğlu A, Demir K, Böbrek Tümörlerini Taklit Eden Ksantogranülatöz Piyelonefrit Olgularının Analizi J Kartal TR 2015;26(1):31-34 doi: 10.5505/jkartaltr.2015.59365
18. Hatipoğlu H, Yılmaz Ç, Yıldırım S, Renal apse olgu sunumu Göztepe Tip Dergisi 19: 51-52, 2004
19. Koçarslan S, Tarini EZ, Özardalı HI, Urethral malakoplakia: a case report Gaziantep Tip Dergisi 2013;19(2): 118-119
20. Ozden C Memis Urinary System Tuberculosis Urology Clinic, University of Health Sciences, Ankara Numune Training and Research Hospital, Ankara Turki Urology Clinic J-Special Topics. 2018; 11 (2): 82-91
21. Wagenlehner FME, Johansen TEB, Cai T, Epidemiology, definition and treatment of complicated urinary tract infections i, Bela Kovacs, Jennifer Kranz, Adrian Pilatz and Zafer Tandoğdu Nature Reviews Urology Voice 17, pages586 - 600 (2020)
22. Pathogenesis of urinary tract infections: an update Thomas M. Hooton Journal of Antimicrobial Chemotherapy, Volume 46, Issue suppl_1, August 2000, Pages 1–7, https://doi.org/10.1093/jac/46.suppl_01 August 2000
23. Lewis AL, Gilbert NM, Roles of the vagina and the vaginal microbiota in urinary tract infection: evidence from clinical correlations and experimental models Published online 2020 Mar 26. doi: 10.3205/id000046
24. T M Hooton TM, Stamm WE Diagnosis and treatment of uncomplicated urinary tract infection Infect Dis Clin North Am.1997 Sep;11(3):551-81. doi: 10.1016/s0891-5520(05)70373-1
25. Gülcen A, Çelik G, Gülcen E Performance evaluation of urinanalysis and culture results in patients suspected urinary tract Original Article Abant Medical Journal Volume 1 | Sayı / Issue 2 | Ağustos / Agustos 2012 doi: 10.5505/abantmedj.2012.47955

26. ÇILBURUNOĞLU M , KİRİŞÇİ Ö , YERLİKAYA H Distribution of Isolates Growing in Urine Cultures Sent to a University Hospital and Examination of Antimicrobial Sensitivity Profile Year 2020, Volume 10, Issue 4, Pages 677 - 683 2020-12 <https://doi.org/10.31832/smj.802643>
27. HATİPOĞLU GH Imaging Modalities in Urinary Tract Infections Rad-yoloji AD, Sağlık Bilimleri Üniversitesi Ankara Numune SUAM, Ankara Turkey Urology Clinic J-Special Topics. 2018; 11 (2): 74-81
28. Gupta, K. Hooton TM, Roberts PL Short-term nitrofurantoin for the treatment of acute uncomplicated cystitis in women. Arch Intern Med, 2007.167: 2207.
29. Gagyor, I, Bleidorn J, Kochen MM Ibuprofen versus fosfomycin for uncomplicated urinary tract infection in women: randomized controlled trial. BMJ, 2015.351: h6544.
30. Cattrall, JWS, Robinson AV, Kirby A A systematic review of randomized clinical trials for oral antibiotic treatment of acute pyelonephritis. Eur J Clin Microbiol Infect Dis, 2018.37: 2285.
31. Gupta, K, Hooton TM, Naber KG, International clinical practice guidelines for the treatment of acute uncomplicated cystitis and pyelonephritis in women: 2010 update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases. Clin Infect Dis, 2011.52: e103
32. Hooton, TM Clinical application. Uncomplicated urinary tract infection. N Engl J Med, 2012.366: 1028.
33. Arakawa, S, Kawahara K, Kawahara M, Efficacy and safety of tazobactam / ceftolose in Japanese patients with uncomplicated pyelonephritis and complicated urinary tract infection. JJ Infect Chemother, 2019.25: 104.
34. Sims M, Mariyanovski V, McLeroy P A prospective, randomized, double-blind, Phase 2 dose range study comparing the efficacy and safety of imipenem / cilastatin plus relebactam with imipenem / cilastatin alone in patients with complicated urinary tract infections. J Infect Chemother, 2017.72: 2616.
35. Horner PJ, Karla Blee K, Lars Falk L 2016 European guide to non-gonococcal urethritis management. Int J STD AIDS, 2016.27: 928.
36. Workowski KA, Bolan GA, Sexually transmitted disease treatment guidelines, 2015. MMWR. Recommendations and reports: Morbidity and mortality weekly report. Cent Dis Contr, 2015.64: 1.
37. Horner PJ, Blee K, Falk L, 2016 European guide to non-gonococcal urethritis management. Int J STD AIDS, 2016.27: 928.
38. Geisler WM, Uniyal A, Lee, CY, Doxycycline versus azithromycin for genital chlamydial infections: a meta-analysis of randomized clinical trials. Sex Transm Dis, 2002.29: 497.
39. Lanjouw E, Ouburg S, Vries HJ, 2015 European guidance on the management of Chlamydia trachomatis infections. Int J STD AIDS, 2016.27: 333.
40. Howell MD, Davis AM, Sepsis and Septic Shock Management. JAMA, 2017.377: 847

41. Bell, BG, Schellevis F , Stobberingh E A systematic review and meta-analysis of the effects of antibiotic consumption on antibiotic resistance. *BMC Infect Dis*, 2014;14: 13.
42. Hulscher, ME, Grol RP, Meer JWM, Prescribing antibiotics in hospitals: a social and behavioral scientific approach. *Lancet Infect Dis*, 2010;10: 167
43. Dellit, TH, Owens RC, McGowan JE Guidelines for the Infectious Diseases Association of America and the Society for Healthcare Epidemiology of America for developing an institutional program to improve antimicrobial management. *Clin Infect Dis*, 2007;44: 159.
44. Başoğlu N, İşlek İ The News in Approach to the Urinary Tract Infection in Children *Bakırköy Tıp Dergisi* 2019;15:317-22 DOI: 10.4274/BTDMJB.galenos.2019.20170810012213
45. Sobel JD, Fisher JF, Kauffman CA Candida Urinary Tract Infections—Epidemiology Clinical Infectious Diseases, Volume 52, Issue suppl_6, May 2011, Pages S433 S436, <https://doi.org/10.1093/cid/cir109>
46. Patel JV, Chambers CV, Gomella LG. Hematuria: etiology and evaluation for the primary care. *Can J Urol* 2008;15 (supp 1):54-62.
47. Naber KG, Bergman B, Bishop MC, Urinary Tract Infection (UTI) Working Group of the Health Care Office (HCO) of the European Association of Urology (EAU). EAU guidelines for the management of urinary and male genital tract infections. *Eur Urol* 2001;40(5):576-88
48. Cander, B. (2016) Hematüri. İsmail Tayfur (Ed) Acil tip kitabı içinde (s.1007-1015). İstanbul: İstanbul kitapevi
49. Mustafa Haki Sucaklı Ürolojik aciller Aile Hekimliği AD. Sütçü İmam Üniversitesi, Kahramanmaraş,Türkiye. Received: 12.06.2016 DOI: 10.4328/DERMAN.4697
50. Pakdemir M. Üriner Acillere Yaklaşım (Acil Tıp Özel Sayısı). *Klinik Gelişim* 2008;21(4):63-9.
51. Sharp VJ, Barnes KT, Erickson BA. Assessment of asymptomatic microscopic hematuria in adults. *Am Fam Physician* 2013;88(11):747-54.