

Bölüm 41

Preoperatif Değerlendirme

Dr. Canan ÖZCAN

Preoperatif değerlendirme ve hazırlık, jinekolojik operasyon geçirecek olan bir kadının cerrahi prosedürünü ve sonrasındaki iyileşme dönemini etkileyebilecek potansiyel durumları incelememizi sağlar. Postoperatif problemlerin birçoğu, preoperatif değerlendirme sırasında öngörülebilir ve doğru hazırlık ile en aza indirilebilir. Bu sayede daha az komplikasyon gelişmesi, hastanede kalış süresinin kısalması ve toplumsal sağlık giderlerinde tasarruf sağlanırken, hasta memnuniyeti de artmış olacaktır. Preoperatif değerlendirme sırasında cerrahın hastayla kuracağı ilişki, hastanın hekimine ve kuruma duyacağı güvenin sağlanmasında çok önemlidir. Değerlendirme muayenesinin ameliyat öncesi anksiyeteyi azalttığı hatta postoperatif ağrı ve hastanede yatış süresini kısalttığı bildirilmiştir. (Egbert,1963)

Preoperatif değerlendirme sürecinde hastanın bireysel ve aile öyküsü alınmalı, fizik muayenesi yapılmalı, gerekli tetkikler ve cerrahi planlama için gerekli ise görüntülemeler yapılmalı, aydınlatılmış onamı alınmalı, mevcut kronik hastalıkları ilgili branş hekimlerine konsülte edilmeli ve hasta anestezi uzmanı tarafından değerlendirilmelidir. Böylelikle gerekli önlemler preoperatif dönemde alınabilir, operasyon zamanındaki gecikme ve ertelemeler önlenebilir. Bu değerlendirme ile hastanın mevcut sağlık durumu daha iyi anlaşılabilir, gerekirse hasta ile tedavi prosedürü üzerinde tekrar görüşülüp değişikliklere gidilmesi de söz konusu olabilir. Örneğin uterin prolapsus şikayeti ile gelen semptomatik konjestif kalp yetmezliği olan bir has-

taya, vajinal histerektomi ve sakrospinöz fiksasyon yapmak yerine pesser uygulaması önerilebilir.

Hastanın öyküsü alınırken yaşı, kilosu, bilinen hastalıkları, kullandığı ilaçlar, ilaç alerjileri, daha önce cerrahi işlem geçirip geçirmediği, geçirdi ise herhangi bir komplikasyon gelişip gelişmediği, kendisinde ya da ailesinde anestezi ile ilgili komplikasyonlar yaşanıp yaşanmadığı, yine kendisi ya da ailesinde tromboemboli öyküsü ya da risk faktörü olup olmadığı sorgulanır. Örneğin malign hipertermi nadir bir anestezi komplikasyonu olmakla birlikte, otozomal dominant geçişli olduğu için kişinin aile öyküsünde irdelenmelidir. Bilinen veya şüpheli komorbiditeleri olan kadınlar, ameliyattan önce tanınmalı, perioperatif tedavi planı oluşturulması ve cerrahi prosedürün sorunsuz tamamlanabilmesi için ilgili birimlere konsülte edilmelidirler.

Günümüzde 65 yaş üzeri kadın sayısı ve dolayısıyla jinekolojik cerrahi ihtiyacı duyan ileri yaş kadın hasta sayısı da artmaktadır. 50.000 yaşlı erişkin hastanın dahil edildiği bir incelemede, elektif cerrahi ile ölüm riskinin 60 yaşın altındakiler için %1.3 iken, 80-89 yaş grubunda 11.3'e yükselmiş olduğu gözlenmiştir. (Linn,1982) Yaşlılığın getirdiği eşlikçi rahatsızlıkları ekarte edersek, yaşın perioperatif sonuçlar üzerindeki etkisinin aslında az olduğu görülür. Yaşla ilgili riskin çoğu bilişsel bozulma, fonksiyonel bozukluk, yetersiz beslenme ve frajiliteyi de içeren artan sayıda komorbiditelerden kaynaklanmaktadır. (Oresanya,2014) Yaş, tek başına cerrahi için bir kontrendikasyon değildir. Ameliyat olabilirlik konusundaki karar; hastanın genel sağlık durumu ve ek

mesi ile cildin sıyrılmasına ya da hafif bir basınçla hematom/ülser oluşumuna yol açacak kadar cilt dokusu ve yüzeysel damarların zayıflamasına neden olabilir. Enfeksiyon riskini artırır, gastrointestinal ülser ve kanamalara neden olabilir, hiperglisemi, hipertansiyon, sıvı retansiyonu gibi yan etkilere yol açarak cerrahi başarıyı olumsuz yönde etkileyebilir. (Anstead,1998; Stuck,1989; Bollet,1955; Sc-hiff,2003)

Perioperatif glukokortikoid dozu ayarlanırken hipotalamo-hipofizer-adrenal aksın suprese olup olmadığı ve planlanan cerrahinin büyüklüğü göz önünde bulundurulmalı; hastanın aldığı inhaler, topikal hatta intraartiküler uygulamalı kortikosteroid tedavilerinin de aksı baskılayabileceği unutulmamalıdır.

Sabah dozu olarak <5 mg/gün prednizon ve eşdeğerleri olan 4mg/gün metilprednizolon, 0.5 mg/gün deksametazon ya da 20mg/gün hidrokortizon alan hastaların; herhangi bir doz glukokortikoidi 3 haftadan kısa süredir alan hastaların ve gün aşırı <10 mg prednizon veya eşdeğerini kullanan hastaların hipotalamo-hipofizer-adrenal aksı suprese olmamış kabul edilir ve bu hastalarda perioperatif steroid şemsiyesi uygulamasına gerek yoktur. Söz konusu hastalar perioperatif dönemde rutin günlük dozlarını almaya devam edebilirler. (Cooper,2003; Axelrod,2003; LaRochelle,1993; Harter,1963; Fauci,1978; Ackerman,1968) Daha uzun süreli ve yüksek dozlarda glukokortikoid kullanan, Cushingoid görünümüne sahip olan, glukokortikoid tedavisi son 1 yıl içinde kesilmiş olan hastalar hipotalamo-hipofizer-adrenal aksın supresyon durumunun değerlendirilmesi için sabah serum kortizolü, ACTH stimülasyon testi gibi ileri tetkiklere ihtiyaç duyacaklardır. Ancak ondan sonra perioperatif steroid şemsiyesi ihtiyacı ve dozu belirlenebilir.

Kaynaklar

1. Ackerman GL, Nolsn CM. Adrenocortical responsiveness after alternate-day corticosteroid therapy. *N Engl J Med* 1968; 278: 405
2. ACOG Practice Bulletin No.195: Prevention of Infection After Gynecologic Procedures. *Obstet Gynecol* 2018; 131:e172
3. ACOG Practice Bulletin No. 84: Prevention of deep vein thrombosis and pulmonary embolism. *Obstet Gynecol* 2007; 110:429 – 40
4. Amaragiri SV, Lees TA. Elastic compression stoc-

kings for prevention of deep vein thrombosis. *Cochrane Database of Systematic Reviews* 2000, Issue 1. Art. No.:CD001484

5. American College of Obstetricians and Gynecologists Committee on Obstetric Practice. ACOG Committee Opinion No.421, November 2008: antibiotic prophylaxis for infective endocarditis. *Obstet Gynecol* 2008; 112:1193
6. Andiman SE, Xu X, Boyce JM, et al. Decreased Surgical Site Infection Rate in Hysterectomy; Effect of a Gynecology-Specific Bundle. *Obstet Gynecol* 2018; 131:991
7. Anstead GM. Steroids, retinoids, and wound healing. *Adv Wound Care* 1998; 11:277
8. Archer C, Levy AR, McGregor M. Value of routine preoperative chest x-rays: a meta-analysis. *Can J Anaesth* 1993; 40:1022
9. Auerbach AD, Vittinghoff E, Maselli J, et al. Perioperative use of selective serotonin reuptake inhibitors and risks for adverse outcomes of surgery. *JAMA Intern Med* 2013; 173:1075
10. Axelrod L. Perioperative management of patients treated with glucocorticoids. *Endocrinol Metab Clin North Am* 2003; 32:367
11. Beattie WS, Warriner CB, Etches R, et al. The addition of continuous intravenous infusion of ketorolac to a patient-controlled analgetic morphine regime reduced postoperative myocardial ischemia in patients undergoing elective total hip or knee arthroplasty. *Anesth Analg* 1997; 84:715
12. Benarroch-Gampel J, Sheffield KM, Duncan CB, et al. Preoperative laboratory testing in patients undergoing elective, low-risk ambulatory surgery. *Ann Surg* 2012; 256-518
13. Berg JW, Appelbaum PS, Lidz CW, et al. *Informed Consent: Legal Theory and Clinical Practice*, 2nd edition, Oxford University Press, New York 2001
14. Bergqvist D. Low molecular weight heparin and unfractionated heparin in thrombosis prophylaxis after major surgical intervention: update of previous meta-analyses. *Br J Surg* 1998; 85:872
15. Bock M, Johansson T, Fritsch G, et al. The impact of preoperative testing for blood glucose concentration and haemoglobin A1c on mortality, changes in management and complications in noncardiac elective surgery: a systematic review. *Eur J Anaesthesiol* 2015; 32:152
16. Bollet AJ, Black R, Bunim JJ. Major undesirable side-effects resulting from prednisolone and prednisone. *J Am Med Assoc* 1955; 158:459
17. Bowater RJ, Stirling SA, Lilford RJ. Is antibiotic prophylaxis in surgery a generally effective intervention? Testing a generic hypothesis over a set of meta-analyses. *Ann Surg* 2009; 249:551
18. Bratzler DW, Dellinger EP, Olsen KM, et al. Clinical practice guidelines for antimicrobial prophylaxis

- in surgery. *Surg Infect (Larchmt)* 2013; 14:73
19. Bratzler DW, Hunt DR. The surgical infection prevention and surgical care improvement projects: national initiatives to improve outcomes for patients having surgery. *Clin Infect Dis* 2006; 43:322
 20. Bromberg JS, Alfrey EJ, Barker CFF, et al. Adrenal suppression and steroid supplementation in renal transplant recipients. *Transplantation* 1991; 51:385
 21. Chee YL, Crawford JC, Watson HG, Greaves M. Guidelines on the assessment of bleeding risk prior to surgery or invasive procedures. British Committee for Standards in Haematology, *Br J Haematol* 2008; 140:496
 22. Clagett GP, Reisch JS. Prevention of venous thromboembolism in general surgical patients. Results of meta-analysis. *Ann Surg* 1988; 208:227–40
 23. Clarke-Pearson DL, DeLong ER, Synan IS, Creasman WT. Complications of low-dose heparin prophylaxis in gynecologic oncology surgery. *Obstet Gynecol* 1984; 64: 689–94
 24. Cobbs v. Grant, 502 P.2d 1, 12 (Cal.1972)
 25. Committee on Gynecologic Practice. Committee opinion no. 619: Gynecologic surgery in the obese woman. *Obstet Gynecol* 2015; 125:274. Reaffirmed 2019
 26. Cooper MS, Stewart PM. Corticosteroid insufficiency in acutely ill patients. *N Engl J Med* 2003; 348:727
 27. Cruise PJ, Foord R. The epidemiology of wound infection. A 10-year prospective study of 62,939 wounds. *Surg Clin North Am* 1980; 60:27
 28. Cummings SR, Eckert S, Krueger KA, et al. The effect of raloxifene on risk of breast cancer in postmenopausal women: results from the MORE randomized trial. Multiple Outcomes of Raloxifene Evaluation. *JAMA* 1999; 281:2189
 29. Danielson D, Bjork K, Card R, et al. Institute for Clinical Systems Improvement. Preoperative Evaluation. Available at: http://www.icsi.org/preoperative_evaluation/preoperative_evaluation_2328.html (Accessed on August 30,2012)
 30. deLange DW, Kars M. Perioperative glucocorticosteroid supplementation is not supported by evidence. *Eur J Intern Med* 2008; 19:461
 31. Durack DT. Prevention of infective endocarditis. *N Engl J Med* 1995; 332:38
 32. Egbert LD, Battit GE, Turndorf H, et al. The value of the preoperative visit. *JAMA*. 1963; 185:553
 33. ENOXACAN Study Group. Efficacy and safety of enoxaparin versus unfractionated heparin for prevention of deep vein thrombosis in elective cancer surgery: a double-blind randomized multicenter trial with venographic assessment. *Br J Surg* 1997; 84:1099–1103
 34. Fanning J, Valea FA. Perioperative bowel management for gynecologic surgery. *Am J Obstet Gynecol* 2011; 205:309
 35. Fauci AS. Alternate-day corticosteroid therapy. *Am J Med* 1978; 64:729
 36. Fisher B, Costantino JP, Wickerham DL, et al. Tamoxifen for prevention of breast cancer: report of the National Surgical Adjuvant Breast and Bowel Project P-1 Study. *J Natl Cancer Inst* 1998; 90:1371
 37. Fleisher LA, Fleischmann KE, Auerbach AD, et al. 2014 ACC/AHA guideline on perioperative cardiovascular evaluation and management of patients undergoing non cardiac surgery: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines. *J AM Coll Cardiol* 2014; 64:e77
 38. Fleisher LA, Fleischmann KE, Auerbach AD, et al. 2014 ACC/AHA guideline on perioperative cardiovascular evaluation and management of patients undergoing noncardiacsurgery: executive summary: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Circulation* 2014; 130:2215
 39. Fraser CG, Preuss FS, Bigford WD. Adrenal atrophy and irreversible shock associated with cortisone therapy. *J Am Med Assoc* 1952; 149:1542
 40. Gandaglia G, Ghani KR, Sood A, et al. Effect of minimally invasive surgery on the risk for surgical site infections: results from the National Surgical Quality Improvement Program (NSQIP) Database. *JAMA Surg* 2014; 149:1039
 41. Geerts WH, Bergqvist D, Pineo GF, Heit JA, Samama CM, Lassen MR, et al. Prevention of venous thromboembolism: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines (8th Edition). *Chest* 2008; 133(suppl): 381S– 453S
 42. Geerts WH, Pineo GF, Heit JA, Bergqvist D, Lassen MR, Colwell CW, et al. Prevention of venous thromboembolism: the Seventh ACCP Conference on Antithrombotic and Thrombolytic Therapy. *Chest* 2004; 126(suppl):338S–400S
 43. Guenaga KK, Matos D, Wille-Jorgensen P. Mechanical bowel preparation for elective colorectal surgery. *Cochrane Database Syst Rev* 2005; 1:CD001544
 44. Harter JG, Reddy WJ, Thorn GW. Studies on an intermittent corticosteroid dosage regimen. *N Engl J Med* 1963; 269:591
 45. Hasdemir PS, Güvenal T. Jinekolojik Onkoloji Cerrahisi Planlanan Hastalarda Preoperatif Değerlendirme. *Türkiye Klinikler J Gynecol Obst-Special Topics* 2015; 8(1)
 46. Hidron AI, Edwards JR, Patel J, et al. NNSH annual update: antimicrobial-resistant pathogens associated with healthcare-associated infections: annual summary of data reported to the National Healthcare Safety Network at the Centers for Disease Control and Prevention, 2006–2007. *Infect Control*

- Hosp Epidemiol 2008; 29:996
47. Ho KM, Tan JA. Stratified meta-analysis of intermittent pneumatic compression of the lower limbs to prevent venous thromboembolism in hospitalised patients. *Circulation* 2013; 128:1003
 48. Holzheimer RG. Prophylaxis of thrombosis with low molecular-weight heparin (LMWH). *Eur J Med Res* 2004; 9:150–70
 49. Horan TC, Andrus M, Dudeck MA. CDC/NHSN surveillance definition of healthcare-associated infection and criteria for specific types of infections in the acute care setting. *Am J Infect Control* 2008; 36:309
 50. Johnson MP, Kim SJ, Langstraat CL, et al. Using Bundled Interventions to Reduce Surgical Site Infection After Major Gynecologic Cancer Surgery. *Obstet Gynecol* 2016; 127:1135
 51. Jung B, Lannerstad O, Pahlman L, et al: Preoperative mechanical preparation of the colon: the patient's experience. *BMC Surg* 7:5, 2007
 52. LaRoche GE Jr, LaRoche AG, Ratner RE, Borenstein DG. Recovery of the hypothalamic-pituitary-adrenal (HPA) axis in patients with rheumatic diseases receiving low-dose prednisone. *Am J Med* 1993; 95:258
 53. Lee T, Marcantonio E, Mangione C, et al. Derivation and prospective validation of a simple index for prediction of cardiac risk of major noncardiac surgery. *Circulation* 1999; 100:1043–9
 54. Lefebvre A, Saliou P, Lucet JC, et al. Preoperative hair removal and surgical site infections: network meta-analysis of randomized controlled trials. *J Hosp Infect* 2015; 91:100
 55. Leizorovicz A, Haugh MC, Chapuis FR, et al. Low molecular weight heparin in prevention of perioperative thrombosis. *BMJ* 1992; 305:913
 56. Leonardi MJ, McGory ML, Ko CY. The rate of bleeding complications after pharmacologic deep venous thrombosis prophylaxis: a systematic review of 33 randomized controlled trials. *Arch Surg* 2006; 141:790
 57. Lewis L, Robinson RF, Yee J, et al. Fatal adrenal cortical insufficiency precipitated by surgery during prolonged continuous cortisone treatment. *Ann Intern Med* 1953; 39:116
 58. Linn BS, Linn MW, Wallen N. Evaluation of results of surgical procedures in the elderly. *Ann Surg* 1982; 195:90
 59. Lubin MF. Is age a risk factor for surgery? *Med Clin North Am* 1993; 77:327
 60. Mathew A, Devereaux PJ, O'Hare A, et al. Chronic kidney disease and postoperative mortality: a systematic review and meta-analysis. *Kidney Int* 2008; 73:1069
 61. Mismetti P, Laporte S, Darmon JY, et al. Meta-analysis of low molecular weight heparin in the prevention of venous thromboembolism in general surgery. *Br J Surg* 2001; 88: 913
 62. Nishimura RA, Otto CM, Bonow RO, et al. 2017 AHA/ACC guideline for the management of patients with valvular heart disease: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol* 2014; 63:e57
 63. Nurmohamed MT, Rosendaal FR, Büller HR, et al. Low- molecular- weight heparin versus Standard heparin in general and orthopedic surgery: a meta-analysis. *Lancet* 1992; 340:152
 64. Oresanya LB, Lyons WL, Finlayson E. Preoperative assessment of the older patient: a narrative review. *JAMA* 2014; 311:2120
 65. ParkeyDy, Burke JJ 2nd, Gallup DG. Gynecological surgery in octogenarians and nonagenarians. *Am J Obstet Gynecol* 2004; 190:1401
 66. Patel T. Surgery in the patient with liver disease. *Mayo Clin Proc* 74:590, 1999
 67. Pellegrini JE, Soper DE, et al. Consensus bundle on prevention of surgical site infections after major gynecologic surgery. *Obstet Gynecol* 2017; 129(1):50-61
 68. Peterson P, Hayes TE, Arkin CF, et al. The preoperative bleeding time test lacks clinical benefit: College of American Pathologists' and American Society of Clinical Pathologists' position article. *Arch Surg* 1998; 133:134
 69. Poirier P, Alpert MA, Fleisher LA, et al. Cardiovascular evaluation and management of severely obese patients undergoing surgery: a science advisory from the American Heart Association. *Circulation* 2009; 120:86
 70. Raschke RA, Reilly BM, Guidry JR, et al. The weight-based heparin dosing nomogram compared with a Standard care nomogram: A randomised controlled trial. *Ann Intern Med* 1993; 119:874-81
 71. Reilly DF, McNeely MJ, Doerner D, et al. Self-reported exercise tolerance and the risk of serious perioperative complications. *Arch Intern Med* 1999; 159:2185
 72. Rucker L, Frye EB, Staten MA. Usefulness of screening chest roentgenograms in preoperative patients. *JAM* 250:3209, 1983
 73. Sachdeva A, Dalton M, Amaragiri SV, Less T. Graduated compression stockings for prevention of deep vein thrombosis. *Cochrane Database Syst Rev* 2014; :CD001484
 74. Salem M, Tainsh RE Jr, Bromberg J, et al. Perioperative glucocorticoid coverage. A reassessment 42 years after emergence of a problem. *Ann Surg* 1994; 219:416
 75. Schiff RL, Welsh GA. Perioperative evaluation and management of the patient with endocrine dysfunction. *Med Clin North Am* 2003; 87:175

76. Shaw M, Mandell BF. Perioperative management of selected problems in patients with rheumatic diseases. *Rheum Dis Clin North Am* 1999; 25:623
77. Smetana GW, Lawrence VA, Cornell JE, American Collage of Physicians. Preoperative pulmonary risk stratification for noncardiothoracic surgery: systematic review for the American College of Physicians. *Ann Intern Med* 2006; 144:581
78. Smetana GW, Macpherson DS. The case against routine preoperative laboratory testing. *Med Clin North Am* 2003; 87:7-40
79. Stacey D, Légaré F, Col NF, et al. Decision aids for people facing health treatment or screening decision. *Cochrane Database Syst Rev* 2014;:CD001431
80. Steinberg JP, Braun BI, Hellinger WC, et al. Timing of antimicrobial prophylaxis and the risk of surgical site infections: results from the Trial to Reduce Antimicrobial Prophylaxis Errors. *Ann Surg* 2009; 250:10
81. Stuck AE, Minder CE, Frey FJ. Risk of infectious complications in patients taking glukocorticoids. *Rev Infect Dis* 1989; 11:954
82. Tower C, Nallapeta S, Vause S. Prophylaxis against infective endocarditis in obstetrics: new NICE guidance: a commentary. *BJOG* 2008; 115:1601
83. Van der Meer JT, Thompson J, Valkenburg HA, Michel MF. Epidemiology of bacterial endocarditis in The Netherlands. II. Antecedent procedures and use of prophylaxis. *Arch Intern Med* 1992; 152:1869
84. Vandembroucke JP, Rosing J, Bloemenkamp KW, et al. Oral contraceptives and the risk of venous thrombosis. *N Engl J Med* 2001; 344:1527
85. Voit SB, Todd JK, Nelsom B, Nyquist AC. Electronic surveillance system for monitoring surgical antimicrobial prophylaxis. *Pediatrics* 2005; 116:1317
86. Warkentin TED, Levine MN, Hirsh J, et al. Heparin-induced thrombocytopenia in patients treated with low-molecular weight heparin or unfractionated heparin. *N Engl J Med* 1995; 332:1330-5
87. Weber WP, Marti WR, Zwahlen M, et al. The timing of surgical antimicrobial prophylaxis. *Ann Surg* 2008; 247:918
88. Williams RG, Yardley MP. Oral contraceptive therapy and the surgical management of ENT patients: a review of current clinical practice. *Clin Otolaryngol Allied Sci* 1990; 158:1213
89. Wilson W, Taubert KA, Gewitz M, et al. Prevention of infective endocarditis: guidelines from the American Heart Association: a guideline from the American Heart Association Rheumatic Fever, Endocarditis, and Kawasaki Disease Committee, Council on Cardiovascular Disease in the Young, and The Council on Clinical Cardiology, Council on Cardiovascular Surgery and Anesthesia, and the Quality of Care and Outcomes Research Interdisciplinary Working Group *Circulation* 2007; 116:1736
90. Wu WC, Schiffner TL, Henderson WG, et al: Preoperative hematocrit levels and postoperative outcomes in older patients undergoing noncardiac surgery. *JAMA* 297:2481, 2007
91. Zimlichman E, Henderson D, Tamir O, et al. Healthcare-associated infections: a meta-analysis of costs and financial impact on the US health care system. *JAMA Intern Med* 2013; 173:2039
92. <https://www.cdc.gov/nhsn/pscmanual/9pscscscur-rent.pdf> (Accessed on June 16, 2017)