



BÖLÜM 4

Astım Atak ve Yönetimi

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Astım atak, astım tanılı bir hastada nefes darlığı, öksürük, göğüste baskı hissi şikayetlerinde progresif artış olması ve solunum fonksiyon testlerinde (SFT) progresif düşüş ile karakterize bir epizodtur (1). Atak, önceden astım tanısı olan hastada karşımıza çıkabileceğ gibi astımın ilk çıkış bulgusu da olabilir.

Astım Atağı Neler Tetikler?

Atak genelde dışarıdan maruz kalınan bir tetikleyici ajan ile (viral üst solunum yolu enfeksiyonları, polen, hava kirliliği vs.) veya yetersiz kontrol edici tedavi nedeni ile olabilir (2,3). Atağı tetikleyen olası faktörler Tablo 1 de özetlenmiştir.

Tablo 1. Astım atağıını tetikleyen olası faktörler

- Viral solunum yolu enfeksiyonları (4)
- Alerjen maruziyeti (polen, ev tozu, mantar sporları vs.) (5)
- Gıda alerjisi (6)
- Hava kirliliği (3,7)
- Yetersiz inhale kortikosteroid (IKS) tedavisi (8)

Kontrol altında olmayan astım, atak için ciddi bir risk faktördür (9). Ancak kontrol altındaki bir astım hastasında da astım atak olabileceği akılda tutulmalıdır (10,11). Semptom kontrolünden bağımsız olarak hastalarda atak riskini artıran faktörler Tablo 2 de özetlenmiştir.

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- Kadın cinsiyet, ileri yaş, önceki 24 saat içinde 8 puftan fazla beta2 agonist kullanım ihtiyacı olması, önceden entübasyon gerektiren ağır atak öyküsü, önceden oral kortikosteroid kullanımı gerektiren acil servis başvurusunun olması halinde hasta yatas açısından değerlendirilmelidir (36).

KAYNAKLAR

1. Reddel HK, Taylor DR, Bateman ED et al. An offical American Thoracic Society/European Respiratory Society statement: asthma control and exacerbations: standardizing endpoints for clinical asthma trials and clinical practice. *Am J Respir Crit Care Med* 2009;180:59-99.
2. Orellano P, Quaranta N, Reynoso J et al. Effect of outdoor air pollution on asthma exacerbations in children and adults: Systematic review and multilevel meta-analysis. *PLoS One*. 2017 Mar 20;12(3):e0174050
3. Ramnath VR, Clark S, Camargo CA Jr. Multicenter study of clinical features of sudden-onset versus slower-onset asthma exacerbations requiring hospitalization. *Respir Care*. 2007 Aug;52(8):1013-1020.
4. Jackson DJ, Johnston SL. The role of viruses in acute exacerbations of asthma. *J Allergy Clin Immunol*. 2010 Jun;125(6):1178-1187
5. Erbas B, Jazayeri M, Lambert KA et al. Outdoor pollen is a trigger of child and adolescent asthma emergency department presentations: A systematic review and meta-analysis. *Allergy*. 2018 Aug;73(8):1632-1641.
6. Burks AW, Tang M, Sicherer S, et al. ICON: food allergy. *J Allergy Clin Immunol*. 2012 Apr;129(4):906-920.
7. Mazenq J, Dubus JC, Gaudart J, et al. City housing atmospheric pollutant impact on emergency visit for asthma: A classification and regression tree approach. *Respir Med*. 2017 Nov;132:1-8.
8. Williams LK, Peterson EL, Wells K, Ahmedani BK, Kumar R, Burchard EG, Chowdhry VK, Favro D, Lanfear DE, Pladenvall M. Quantifying the proportion of severe asthma exacerbations attributable to inhaled corticosteroid nonadherence. *J Allergy Clin Immunol*. 2011 Dec;128(6):1185-1191.e2. doi: 10.1016/j.jaci.2011.09.011. Epub 2011 Oct 21. PMID: 22019090; PMCID: PMC3229671.
9. Haselkorn T, Fish JE, Zeiger RS, et al. TENOR Study Group. Consistently very poorly controlled asthma, as defined by the impairment domain of the Expert Panel Report 3 guidelines, increases risk for future severe asthma exacerbations in The Epidemiology and Natural History of Asthma: Outcomes and Treatment Regimens (TENOR) study. *J Allergy Clin Immunol*. 2009 Nov;124(5):895-902.
10. Reddel H, Ware S, Marks G, et al. Differences between asthma exacerbations and poor asthma control. *Lancet*. 1999 Jan 30;353(9150):364-369.
11. Kohansal R, Martinez-Camblor P, Agustí A, et al. The natural history of chronic airflow obstruction revisited: an analysis of the Framingham offspring cohort. *Am J Respir Crit Care Med*. 2009 Jul 1;180(1):3-10.
12. Alvarez GG, Schulzer M, Jung D, et al. A systematic review of risk factors associated with near-fatal and fatal asthma. *Can Respir J*. 2005 Jul-Aug;12(5):265-270.

13. Suissa S, Blais L, Ernst P. Patterns of increasing beta-agonist use and the risk of fatal or near-fatal asthma. *Eur Respir J.* 1994 Sep;7(9):1602-1609.
14. Sturdy PM, Victor CR, Anderson HR et al; Mortality and Severe Morbidity Working Group of the National Asthma Task Force. Psychological, social and health behaviour risk factors for deaths certified as asthma: a national case-control study. *Thorax.* 2002 Dec;57(12):1034-1039.
15. Pumphrey RS, Gowland MH. Further fatal allergic reactions to food in the United Kingdom, 1999-2006. *J Allergy Clin Immunol.* 2007 Apr;119(4):1018-1019.
16. Nowak RM, Tomlanovich MC, Sarkar DD et al. Arterial blood gases and pulmonary function testing in acute bronchial asthma. Predicting patient outcomes. *JAMA.* 1983 Apr 15;249(15):2043-2046.
17. Carruthers DM, Harrison BD. Arterial blood gas analysis or oxygen saturation in the assessment of acute asthma? *Thorax.* 1995 Feb;50(2):186-188.
18. White CS, Cole RP, Lubetsky HW et al. Acute asthma. Admission chest radiography in hospitalized adult patients. *Chest.* 1991 Jul;100(1):14-16.
19. Global Initiative for Asthma (GINA). Global strategy for asthma management and prevention. Updated 2020. www.ginaasthma.org
20. Cates CJ, Welsh EJ, Rowe BH. Holding chambers (spacers) versus nebulisers for beta-agonist treatment of acute asthma. *Cochrane Database Syst Rev.* 2013 Sep 13;2013(9)
21. Hui DS, Chow BK, Lo T et al.. Exhaled air dispersion during high-flow nasal cannula therapy *versus* CPAP *via* different masks. *Eur Respir J.* 2019 Apr 11;53(4):1802339.
22. Rowe BH, Spooner CH, Ducharme FM et al. Corticosteroids for preventing relapse following acute exacerbations of asthma. *Cochrane Database Syst Rev.* 2001;(1):CD000195.
23. Edmonds ML, Milan SJ, Camargo CA Jr et al. Early use of inhaled corticosteroids in the emergency department treatment of acute asthma. *Cochrane Database Syst Rev.* 2012 Dec 12;12(12):CD002308.
24. Kayani S, Shannon DC. Adverse behavioral effects of treatment for acute exacerbation of asthma in children: a comparison of two doses of oral steroids. *Chest.* 2002 Aug;122(2):624-628
25. Jones AM, Munavvar M, Vail A et al. Prospective, placebo-controlled trial of 5 vs 10 days of oral prednisolone in acute adult asthma. *Respir Med.* 2002 Nov;96(11):950-954.
26. Hasegawa T, Ishihara K, Takakura S et al. Duration of systemic corticosteroids in the treatment of asthma exacerbation; a randomized study. *Intern Med.* 2000 Oct;39(10):794-797.
27. Griffiths B, Ducharme FM. Combined inhaled anticholinergics and short-acting beta₂-agonists for initial treatment of acute asthma in children. *Paediatr Respir Rev.* 2013 Dec;14(4):234-235.
28. Kirkland SW, Vandenberghe C, Voaklander B et al. Combined inhaled beta-agonist and anticholinergic agents for emergency management in adults with asthma. *Cochrane Database Syst Rev.* 2017 Jan 11;1(1):CD001284.
29. Rowe BH, Bretzlaff JA, Bourdon C, et al. Magnesium sulfate for treating exacerbations of acute asthma in the emergency department. *Cochrane Database Syst Rev.* 2000;(2):CD001490.
30. Nair P, Milan SJ, Rowe BH. Addition of intravenous aminophylline to inhaled beta(2)-agonists in adults with acute asthma. *Cochrane Database Syst Rev.* 2012 Dec 12;12(12):CD002742.
31. Watts K, Chavasse RJ. Leukotriene receptor antagonists in addition to usual care for acute asthma in adults and children. *Cochrane Database Syst Rev.* 2012 May 16;2012(5):CD006100.

32. Normansell R, Sayer B, Waterson S, et al. Antibiotics for exacerbations of asthma. Cochrane Database Syst Rev. 2018 Jun 25;6(6):CD002741.
33. Lim WJ, Mohammed Akram R, Carson KV, et al. Non-invasive positive pressure ventilation for treatment of respiratory failure due to severe acute exacerbations of asthma. Cochrane Database Syst Rev. 2012 Dec 12;12:CD004360.
34. Kelly AM, Kerr D, Powell C. Is severity assessment after one hour of treatment better for predicting the need for admission in acute asthma? Respir Med. 2004 Aug;98(8):777-781.
35. Grunfeld A, FitzGerald J. Discharge considerations for adult asthmatic patients treated in emergency departments. Can Respir J 1996;3:322-327.
36. Weber EJ, Silverman RA, Callaham ML et al. A prospective multicenter study of factors associated with hospital admission among adults with acute asthma. Am J Med. 2002 Oct 1;113(5):371-378.