

Bölüm 19

AKUT İSHALDE BESLENME

İsmail POLAT¹

GİRİŞ

Akut ishal genellikle 24 saat içinde 3'ten fazla normal kıvamından daha sulu, ateş veya kusmanın eşlik edebildiği dışkılama olarak tanımlanmaktadır. Akut ishal tipik olarak 14 günden fazla sürmez (1). Akut ishal gelişmekte olan ülkelerde hastaneye başvuruların önemli bir kısmını oluşturmaktadır. Tüm dünyada 5 yaş altı çocuklar arasında yılda 1,5-2,5 milyon ölüme sebebiyet verdiği tahmin edilmekte olup, pediatrik morbidite ve mortalitenin en önde gelen sebepleri arasındadır. İshalden ölüm hala kabul edilebilir sayıların çok üstünde olsada 1980-1990 yıllarına göre önemli ölçüde azaltılmıştır (2).

Akut ishal tedavisinde en önemli basamaklar, hastanın klinik olarak değerlendirilmesi, varsa dehidratasyonun derecesinin saptanıp gerekli müdahalelerin yapılması, farmakolojik tedavi gereksinimi, diyet ve beslenme konusunda ailelerin bilgilendirilmesidir. Bu temel basamaklar bu bölümde anlatılmaktadır.

KLİNİK DEĞERLENDİRME

İshal şikayeti ile başvuran hastalarda ilk olarak klinik geçmiş irdelenmeli, ishalin ne zaman başladığı, sayısı, kıvamı, karakteri (kan, mukus, safra varlığı), kusmanın eşlik edip etmediği sorgulanmalıdır. Anne sütü dahil hastanın son oral alımları, ishal öncesi kilosu, idrar çıkarıp çıkarmadığı, bilinç durumu dahil tüm semptomlar dikkatle incelenmelidir. Fiziksel muayeneye ek olarak vital bulguları değerlendirilmeli, hastanın göz yaşı varlığı, ağız kuruluğu olup olmadığı, cilt turgor basıncı, solunum karakteri (örn abdominal ve derin solunum metabolik asidoz göstergesidir), kapiller dolum zamanı dahil hastanın tüm fizik muayenesi detay-

¹ Uzm. Dr. Özel Buhara Hastanesi, can-vatan@hotmail.com

beslenmeye başlamaktır. Beslenmeye hastalık sırasında 4-6 saatten fazla ara verilmemelidir. Anne sütü alan çocuklar emzirilmeye ara vermeden devam edilmelidir. Formula mama ile beslenen çocukların mamaları değiştirilmez. Beslenmede kalori yüksek tutulmalı, kompleks karbonhidratlar tercih edilmelidir. Yağdan fakir beslenmeye ihtiyaç olmayıp yüksek sukroz, früktoz içeriği olan gıdalardan uzak durulmalıdır.

KAYNAKLAR

1. Guarino A, Ashkenazi S, Gendrel D, et al. European Society for Pediatric Gastroenterology, Hepatology, and Nutrition/European Society for Pediatric Infectious Diseases evidence-based guidelines for the management of acute gastroenteritis in children in Europe: update 2014. *J Pediatr Gastroenterol Nutr* 2014; 59:132-152.
2. Snyder JD, Merson MH. The magnitude of the global problem of acute diarrhoeal disease: a review of active surveillance data. *Bull World Health Organ.* 1982;60:605-13.
3. Duggan C, Refat M, Hashem M, Wolff M, Fayad I, Santosham M. How valid are clinical signs of dehydration in infants? *J Pediatr Gastroenterol Nutr* 1996;22:56-61.
4. Duggan C, Santosham M, Glass RI. The management of acute diarrhea in children: oral rehydration, maintenance, and nutritional therapy. *MMWR* 1992;41(No. RR-16):1-20.
5. "Anonymous. Practice parameter: the management of acute gastroenteritis in young children. American Academy of Pediatrics Provisional Committee on Quality Improvement Subcommittee on Acute Gastroenteritis. *Pediatrics* 1996;97:424-35.
6. Nager AL, Wang VJ. Comparison of nasogastric and intravenous methods of rehydration in pediatric patients with acute dehydration. *Pediatrics* 2002;109:566-72.
7. Atherly-John YC, Cunningham SJ, Crain EF. A randomized trial of oral vs intravenous rehydration in a pediatric emergency department. *Arch Pediatr Adolesc Med* 2002;156:1240-3.
8. Jackson J, Bolte RG. Risks of intravenous administration of hypotonic fluids for pediatric patients in ED and prehospital settings: let's remove the handle from the pump. *Am J Emerg Med* 2000;18:269-70.
9. Anonymous. Water with sugar and salt [editorial]. *Lancet* 1978;2:300-1.
10. Santosham M, Keenan EM, Tulloch J, Broun D, Glass R. Oral rehydration therapy for diarrhea: an example of reverse transfer of technology. *Pediatrics* 1997;100:E10.
11. Guarino A, Ashkenazi S, Gendrel D, et al. European Society for Pediatric Gastroenterology, Hepatology, and Nutrition/European Society for Pediatric Infectious Diseases evidence-based guidelines for the management of acute gastroenteritis in children in Europe: update 2014. *J Pediatr Gastroenterol Nutr* 2014; 59:132.
12. King CK, Glass R, Bresee JS, et al. Managing acute gastroenteritis among children: oral rehydration, maintenance, and nutritional therapy. *MMWR Recomm Rep* 2003; 52:1.
13. Hirschhorn N, Kinzie JL, Sachar DB, et al. Decrease in net stool output in cholera during intestinal perfusion with glucose-containing solutions. *N Engl J Med* 1968; 279:176.
14. Pierce NF, Sack RB, Mitra RC, et al. Replacement of water and electrolyte losses in cholera by an oral glucose-electrolyte solution. *Ann Intern Med* 1969; 70:1173.
15. World Health Organization. Reduced osmolarity oral rehydration salts (ORS) formulation. UNICEF House, New York, NY 2001. Available at: www.who.int/child-adolescent-health/New_Publications/NEWS/Expert_consultation.htm (Accessed on January 18, 2006).
16. Hahn S, Kim Y, Garner P. Reduced osmolarity oral rehydration solution for treating dehydration due to diarrhoea in children: systematic review. *BMJ* 2001; 323:81.
17. Hahn S, Kim S, Garner P. Reduced osmolarity oral rehydration solution for treating dehydration caused by acute diarrhoea in children. *Cochrane Database Syst Rev* 2002; :CD002847.
18. Gregorio GV, Gonzales ML, Dans LF, Martinez EG. Polymer-based oral rehydration solution for treating acute watery diarrhoea. *Cochrane Database Syst Rev* 2016; 12:CD006519.

19. Duggan C, Fontaine O, Pierce NF, et al. Scientific rationale for a change in the composition of oral rehydration solution. *JAMA* 2004; 291:2628.
20. Nalin DR, Cash RA, Rahman M, Yunus M. Effect of glycine and glucose on sodium and water adsorption in patients with cholera. *Gut* 1970; 11:768.
21. Sullivan PB. Nutritional management of acute diarrhea. *Nutrition* 1998; 14:758-62
22. Brown KH, Gastanaduy AS, Saavedra JM, et al. Effect of continued oral feeding on clinical and nutritional outcome of acute diarrhea in children. *J Pediatr* 1988; 112:191-200.
23. Szajevska H, Hoekstra JH, Sandhu BK, et al. Management of acute gastroenteritis in Europe and the impact of gastroenteritis in Europe and the impact of new recommendation: a multicenter study. *J Pediatr Gastroenterol Nutr* 2000; 30:522-7
24. Goodlad RA, Plump JA, Write NA. Epithelial cell proliferation and intestinal absorptive function during starvation and refeeding in the rat. *Clin Sci* 1988; 74:301-6
25. Elia M, Goren A, B-ehrens R, Barber RW, Neale G. Effect of total starvation and very low calorie diets on intestinal permeability in man. *Clin Sci* 1987; 73:205-10
26. Maclean WC. The nutritional management of acute diarrhea. *Saudi J gastroenterol* 1996; 2:11-4.
27. Baker SS, Davis AM. Hypocaloric oral therapy during an episode of diarrhea and vomiting can lead to severe malnutrition. *J pediatr Gastroenterol Nutr* 1998; 27:1-5.
28. Guarino A, Albano F, Ashkenazi S et al. European Society for Pediatric Gastroenterology, Hepatology, and Nutrition/European Society for Pediatric Infectious Diseases evidence-based guidelines for the management of acute gastroenteritis in children in Europe. *J Pediatr Gastroenterol Nutr* 2008; 46:s81-122
29. Chouraqui JP, Michard-Lenoir AP. Feeding infants and young children with acute diarrhea. *Arc Pediatr* 2007; 14:176-80.
30. Isolauri E, Vesikari T. Oral rehydration, rapid feeding and cholestyramine for treatment of acute diarrhea. *J Pediatr Gastroenterol Nutr* 1985; 4:366-74
31. Isolauri E, Juntunen M, Wiren S, Vuorinen P, Koivula T. Intestinal permeability changes in acute gastroenteritis: effects of clinical factors and nutritional
32. Duggan C, Nurko S. "Feeding the gut": the scientific basis for continued enteral nutrition during acute diarrhea. *J Pediatr* 1997; 131: 801--8.
33. Sandhu BK; European Society of Paediatric Gastroenterology, Hepatology, and Nutrition Working Group on Acute Diarrhoea. Rationale for early feeding in childhood gastroenteritis. *J Pediatr Gastroenterol Nutr* 2001; 33(Suppl 2):S13--6.
34. Rabbani GH, Teka T, Zaman B, Majid N, Khatun M, Fuchs GJ. Clinical studies in persistent diarrhea: dietary management with green banana or pectin in Bangladeshi children. *Gastroenterology* 2001; 121:554--60.
35. Checkley W, Gilman RH, Black R, et al. Effects of nutritional status on diarrhea in Peruvian children. *J Pediatr* 2002; 140:210--8.
36. Pang XL, Honma S, Nakata S, Vesikari T. Human caliciviruses in acute gastroenteritis of young children in the community. *J Infect Dis* 2000; 181:S288--94.
37. Bhutta TI, Tahir KI. Loperamide poisoning in children. *Lancet* 1990; 335:363.
38. Schwartz JC. Racecadotril: a new approach to the treatment of diarrhoea. *Int J Antimicrob Agents* 2000; 14:75--9.
39. Salazar-Lindo E, Santisteban-Ponce J, Chea-Woo E, Gutierrez M. Racecadotril in the treatment of acute watery diarrhea in children. *N Engl J Med* 2000; 343:463--7.
40. Cezard JP, Duhamel JF, Meyer M, et al. Efficacy and tolerability of racecadotril in acute diarrhea in children. *Gastroenterology* 2001; 120:799--805.
41. Hambidge K. Zinc and diarrhea. *Acta Pediatr Suppl* 1992; 381:82--6.
42. Castillo-Duran C, Vial P, Uauy R. Trace mineral balance during acute diarrhea in infants. *J Pediatr* 1988; 113:452--7.
43. Sachdev HP, Mittal NK, Mittal SK, Yadav H. A controlled trial on utility of oral zinc supplementation in acute dehydrating diarrhea in infants. *J Pediatr*
44. Sazawal S, Black RE, Bhan MK, Bhandari N, Sinha A, Jalla S. Zinc supplementation in young children with acute diarrhea in India. *N Engl J Med* 1995; 333:839--44.

45. Bhandari N, Bahl R, Taneja S, et al. Substantial reduction in severe diarrheal morbidity by daily zinc supplementation in young north Indian children. *Pediatrics* 2002;109:e86.
46. Gibson GR, Roberfroid MB. Dietary modulation of the human colonic microbiota: introducing the concept of prebiotics. *J Nutr* 1995;125:1401--12.
47. Lu L, Walker WA. Pathologic and physiologic interactions of bacteria with the gastrointestinal epithelium. *Am J Clin Nutr* 2001;73: 1124S--30S.
48. Walker WA. Role of nutrients and bacterial colonization in the development of intestinal host defense. *J Pediatr Gastroenterol Nutr* 2000;30(Suppl 2):S2--7.
49. Roberfroid MB. Prebiotics: preferential substrates for specific germs? *Am J Clin Nutr* 2001;73:406S--9S.
50. Dai D, Walker WA. Protective nutrients and bacterial colonization in the immature human gut. *Adv Pediatr* 1999;46:353--82.
51. Morrow A, Ruiz-Palacios G, Altaye M, et al. Human milk oligosaccharides are associated with protection against diarrhea in breast-fed infants. *Ped Res* 2003;53:167A.