

Guideline Evidence

Guideline Topic: Pediatric Oral Rehydration Therapy

Author: George L. Higgins III, MD

Date of Creation: 1/20/10 Sugg Update: 1/20/2011

Search Criteria: Gastroenteritis, Oral Rehydration Therapy,
Dehydration, Anti-emetic Therapy

Databases: Ovid, Pub Med

Key Guidelines (Dates) Managing acute gastroenteritis among children:
Oral rehydration, maintenance and nutritional therapy
CDC Guideline 2003

#	Recommendation	Source	Classification	Level of Evidence
1	Oral rehydration therapy (ORT) should now be considered the initial therapy of choice in the majority of children with mild to moderate dehydration associate with acute gastroenteritis.	*Cochrane Database of Systematic Reviews 2006;3:CD004390	Meta-analysis of randomized controlled trials	la (Agency for Healthcare Policy and Research Classification)
2	ORT, when compared to intravenous rehydration therapy, does not prolong the Emergency Department length of stay.	*Arch Pediatr Adolesc Med 2002;156:1240-1243 *Pediatr Emerg Care 2004;20:215-218	RCTs	lb
3	Bedside ultrasound can be a noninvasive way to determine the degree of dehydration-associated hypovolemia. The diameters of the aorta and the inferior vena cava are measured, and the A/IVC ratio is calculated. A ratio of >1 indicates normal hydration, while a ratio of <0.75 is indicative of significant dehydration. The ratio can be followed to monitor the effectiveness of rehydration therapy.	*Acad Emerg Med 2007;14:841-845	RCTs	lb
4	Noninvasive end-tidal carbon dioxide monitoring can predict dehydration-associated acidosis in children. An ET _{CO2} of >34mmHg predicts a [HCO ₃] of >15mmol/L, while an ET _{CO2} of <31mmHg indicates the [HCO ₃] is ≤/≠ 15mmol/L.	*Pediatrics 2006;118:260-267	Controlled Study	lia
5	Ondansetron is an effective and safe anti-emetic in the management of persistent vomiting in children.	*Ann Emerg Med 2002;39:397-403 *NEJM 2006;354:1698-1705 *Ann Emerg Med 2008;52:22-29 *Arch Pediatr and Adolesc Med 2008;162:858-865	RCTs	lb
6	Once vomiting has been controlled, immediate re-institution of the usual diet, including breast feeding, is encouraged in children with gastroenteritis.	Arch Dis Child 2003;88:455-457	Meta-analysis of randomized controlled trials	la
7				
8				
9				
10				
11				
12				

#	Recommendation	Source	Classification	Level of Evidence
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				