Acute Gastroenteritis

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changing the outcome together

FAST FACTS

75–90%
of acute gastroenteritis has a viral etiology

associated symptoms of AGE typically resolve in the first 48–72 hours

WHEN TO REFER

Refer to the Cincinnati Children's Emergency Department:

- If any red flags are present
- If unable to complete structured ORT even with ondansetron

Acute gastroenteritis (AGE) is a self-limiting diarrheal illness typically of viral etiology. Oral rehydration therapy (ORT) is the mainstay of treatment in patients with mild to moderate levels of dehydration. ORT is easily administered in the PCP office, potentially saving the family hours of waiting in the emergency department (ED) or urgent care.

ASSESSMENT

Perform a focused history and thorough history and physical/abdominal exam (HPE). Assess hydration level using the clinical dehydration scale on next page.

Symptoms of AGE typically have a rapid onset and may be associated with fever, nausea, vomiting and abdominal discomfort. Significant diarrhea is the hallmark feature of AGE and can last up to 7 days.

HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

- Bloody diarrhea
- Diarrhea lasting longer than 7 days
- Focal abdominal pain that is concerning for a surgical abdomen
- General appearance of being drowsy, limp, cold, comatose
- History of type 1 diabetes, immunodeficiency or significant gastrointestinal complications
- Patient is toxic or in severe dehydration or hypovolemic shock

DIAGNOSTIC TESTING

Routine laboratory tests are not recommended if AGE is strongly suspected and patient is hemodynamically stable and able to tolerate management outlined below. Consider renal panel and CBC if concern for surgical infectious process or severe dehydration. In severe dehydration, consider checking blood sugar before making ED referral.

MANAGEMENT

Patients presenting to the office with suspected AGE with or without mild to moderate dehydration should be trialed on ORT. The key to success is a structured and regimented approach.

Administer ORT in-office for 30 minutes, ideally with electrolyte-containing solutions or 1:1 juice to water. Encourage family participation by having the family set a timer for five minutes and administer the doses using an oral syringe or medicine cup.

If patient vomits during ORT, consider trialing ondansetron (see guidelines on back page), waiting 15 minutes and resuming ORT. Alternatively, if child is well-appearing, consider having family trial ORT at home with ondansetron.

Weight	ORT Guidelines
<10 kg	10 mL every 5 min x 30 min
10–20 kg	20 mL every 5 min x 30 min
>20 kg	35 mL every 5 min x 30 min

If you would like additional copies of this tool, or would like more information, please contact the Physician Outreach and Engagement team at Cincinnati Children's.

For urgent issues or to speak with an emergency medicine specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.

Tool developed by Cincinnati Children's physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.

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Patient Presents

Standard Workup

Perform a focused history and physical/abdominal exam (HPE). Assess level of hydration using the clinical dehydration scale.

Clinical Dehydration Scale

	0 Points	1 Point	2 Points
General Appearance	Normal	Thirsty, restless or lethargic but irritable when touched	Drowsy, limp, cold or comatose
Eyes	Normal	Slightly sunken	Very sunken
Mucous Membranes	Moist	"Tacky" or "sticky"	Dry
Tears	Tears	Decreased	Absent

0 Points = No dehydration, 1–4 Points = Mild to moderate dehydration, 5+ Points = Moderate to severe dehydration

HPE (HISTORY AND PHYSICAL EXAM) RED FLAGS

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Any Red Flags?

Yes

Refer to ED
In severe dehydration, consider checking blood sugar first.

No

Routine laboratory tests are not recommended if AGE is strongly suspected and patient is hemodynamically stable and able to tolerate management outlined below.

Consider renal panel and CBC if concern for surgical infectious process or severe dehydration.

Initiate structured, regimented oral rehydration therapy (ORT) in-office for patients with or without mild to moderate dehydration.

Management

Administer ORT in-office for 30 minutes (ideally with electrolyte-containing solutions or 1:1 juice to water). Encourage family participation.

If patient vomits during ORT, consider trialing ondansetron, waiting 15 minutes and resuming ORT. Alternatively, if child is well-appearing, consider having family trial ORT at home with ondansetron.

Weight	ORT Guidelines
<10 kg	10 mL every 5 min x 30 min
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Ondansetron Guidelines

Standard ODT (oral-dissolvable tab) dosing:
- 8–15 kg 2 mg ODT
- 15–30 kg 4 mg ODT
- >30 kg 8 mg ODT

Standard liquid dosing:
- 0.15 mg/kg

Do not use in infants <6 months.

Do not use in patients with history of cardiac disease if concern for prolonged QT or if contraindicated with other medications.

Is patient able to complete ORT in-office or at home?

Yes → **Monitor**

No → (Intractable vomiting in office despite structured ORT and/or ondansetron) → **Consider an ED referral**

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