

# March 2026 Monthly Review

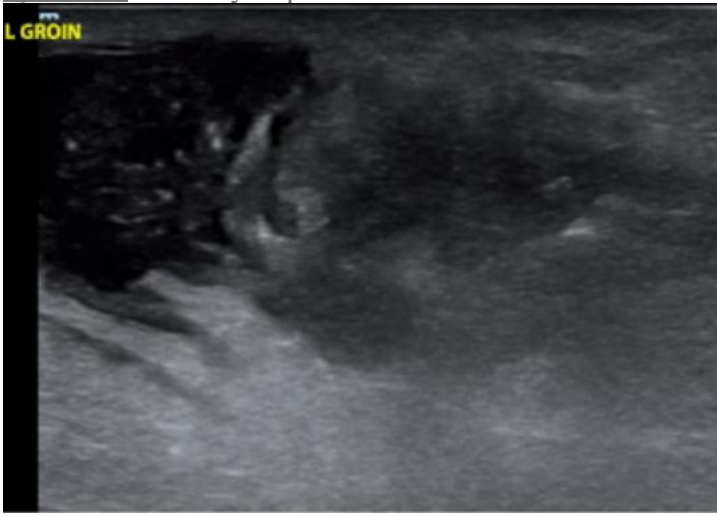
## Ultrasound: NSTI

- NSTI can be challenging to diagnose.
  - Need to have a high clinical suspicion
  - Esp consider in those who are immunosuppressed
  - Look for pain out of proportion to the exam as an early sign
- The sonographic evidence of an abscess typically presents on US a spherical or irregularly shaped **anechoic (black)** or **hypoechoic (dark gray)** fluid collection.
- Purulent material is rarely totally liquid! Might have some brighter debris within it.
- Look for the 'positive Squish Sign'
  - To test for the squish sign, you apply gentle, rhythmic pressure (a "bouncing" motion) directly over the suspected area using the high-frequency linear transducer. A Positive Squish Sign: If the collection is a liquid abscess, the pressure will cause the internal echogenic debris to move, swirl, or "squish" around within the cavity.

## Commonly Missed Questions on Quiz

**Q1:**

Question: Would you proceed with I&D based on this image?



Answer: Yes, you would I&D this image.

The sonographic appearance of an abscess typically presents on ultrasound as a spherical or irregularly shaped anechoic (black) or hypoechoic (dark gray) fluid collection. However, purulent material is rarely purely liquid; it usually contains echogenic debris (white specks) floating within it.

To test for the squish sign, you apply gentle, rhythmic pressure (a "bouncing" motion) directly over the suspected area using the high-frequency linear transducer. A Positive Squish Sign: If the collection is a liquid abscess, the pressure will cause the internal echogenic debris to move, swirl, or "squish" around within the cavity. It visually confirms that the contents are fluid and mobile. A Negative Sign: If the area is instead a phlegmon (organized, inflamed, solid tissue) or severe cellulitis (often displaying a "cobblestone" appearance of edematous subcutaneous fat), the tissue will compress as a single solid unit under the probe. You will not see any internal fluid motion. The primary value of the squish sign is helping you avoid a "dry tap." Utilize color flow to ensure that there is not active flow concerning for something like an aneurysm or hematoma.

### **Peds: Constipation**

- Constipation in kids is common – how do we know when to consider more of a workup?
  - Anyone with medical conditions that predispose to severe constipation (Cerebral palsy, CF, developmental delay, etc)
  - Anyone with a condition that predisposes them to bowel obstructions (history of abdominal surgeries or with medical problems like celiac disease or IBD)
  - Anyone who is followed by the GI service for constipation OR has already failed a home cleanout
- Hirschsprung disease is a huge risk factor for potential pathology in the pediatric population presenting with abd discomfort – have a very low bar to obtain a 2 view abdominal xray even if a kid 'looks good'.
  - As a reminder, Hirschsprung disease is a congenital condition that results due to the failure of ganglion cells to normally migrate resulting in the affected portion of intestine, most commonly the rectosigmoid, being unable to relax and experience normal peristalsis.

### **Commonly Missed Questions on Quiz**

#### **Q2:**

Question: A 2yo male presents with 1 week of decreased stooling with none in last 2 days. His family reports he has also not been as interested in feeding and felt warm today but has not had any vomiting. He has history of Hirschsprungs repaired at 6 months old but has been doing well since last follow up 3 months prior. They presented today to get

some medicine that will help him stool. On exam, he is well appearing with mild abdominal distension and has moderate fussing/discomfort with abdominal palpation but no rebound. The next best step in his management would be:

Answer: Correct answer is to "Obtain a 2 view abdominal radiograph". Hirschsprung-associated enterocolitis (HAEC) can be found in patients both prior to their initial diagnosis or following their surgical correction. As a reminder, Hirschsprung disease is a congenital condition that results due to the failure of ganglion cells to normally migrate resulting in the affected portion of intestine, most commonly the rectosigmoid, being unable to relax and experience normal peristalsis. The cause is believed to be multifactorial, with both familial and spontaneous cases, and occurs at a rate of approximately 1 in 5,000 live births affecting males more than females and often associated with other congenital abnormalities including trisomy 21. It is most often diagnosed in the first 48hrs of life but some cases may present in older children.

HAEC arises secondary to an obstruction of the colon leading to colonic distention, often at the transition zone between healthy and involved colon or at the site of surgical correction. If the obstruction is not relieved, it leads to decreased perfusion to the involved colon, allowing translocation of gastrointestinal flora with subsequent systemic sepsis and colonic necrosis.

Initial symptoms, such as abdominal distension, foul smelling diarrhea, decreased oral intake and fever are often nonspecific. As such, it is imperative for clinicians to maintain a high degree of clinical suspicion in any patient with HD, starting with plain xrays even for the "not that sick looking" kid. If imaging is reassuring with no signs of obstruction and they remain well and tolerate PO in the ED, I would still recommend contacting their pediatric surgeon. They often have a low threshold to admit for observation and I would also be sure that family is comfortable prior to any plan to discharge.

Treatment should be tailored to the degree of systemic illness. All patients should have rectal irrigation started to attempt to lessen the degree of obstruction. In patients with mild illness, antibiotics may be deferred with intravenous treatment being employed in sicker patients.

Nice review with additional details.

Gosain A, Frykman PK, Cowles RA, Horton J, Levitt M, Rothstein DH, Langer JC, Goldstein AM; American Pediatric Surgical Association Hirschsprung Disease Interest Group. Guidelines for the diagnosis and management of Hirschsprung-associated enterocolitis. *Pediatr Surg Int*. 2017 May;33(5):517-521. doi: 10.1007/s00383-017-4065-8. Epub 2017 Feb 2. PMID: 28154902; PMCID: PMC5395325.

[Obtain article here](#)

### **Clin Ops: Fistula Bleed**

- Always start with direct, focused pressure

- The **“bottle cap” technique is highly effective** for targeted compression while preserving flow
- **Escalate stepwise**, avoiding overly aggressive measures early
- **Figure-of-eight sutures provide definitive control** when conservative measures fail
- **Tourniquets are a last resort** due to high risk of fistula loss
- Always **reassess for thrill/bruit** after bleeding control
- The central balance: **control hemorrhage while preserving dialysis access**

### **Clin Ops: Asthma CPG**

- Be SMART!
  - SMART = Single Maintenance and Reliever Therapy
  - Allows less steroid burst utilization, and better yet, allows for better long term asthma control by introducing a maintenance Inh corticosteroid
- Characterize your patient’s asthma to determine approach
  - Mild/Moderate/Severe persistent based on timing, frequency etc

Ensure success with the discharge