

# Bilious Emesis

Emesis may be classified as bilious when there is a significant quantity, more than just a few drops, of green (usually dark green) vomit. Bilious emesis is a common clinical sign of bowel obstruction, the most emergent being malrotation with midgut volvulus. This is a surgical emergency and requires prompt evaluation.

## What is malrotation with midgut volvulus?

Malrotation occurs when the intestine fail to properly rotate and fixate to the retroperitoneum during the early weeks of pregnancy. Instead of being securely anchored by the mesentery, the bowel becomes vulnerable to twisting at any time. When the twisting occurs, the blood supply to the intestine is cut off leading to ischemic injury. Emergent surgery is required to untwist the bowel, restore blood flow, and remove any necrotic bowel.

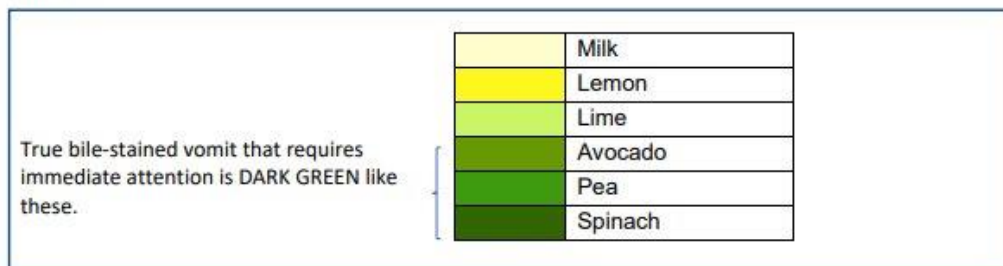
### Signs and Symptoms

- Bilious emesis

In cases with volvulus, late signs and symptoms can include:

- Abdominal distension
- Tenderness
- Guarding
- Signs of shock

Chart 1



## How do you diagnose and treat?

- If not already, make the patient NPO
- **The gold standard for diagnosis is an Upper GI study (UGI)**
- Consult Neonatology at Children’s Hospital of Illinois (CHOI) after the first incidence of bilious emesis.

**BILIOUS EMESIS IN ANY CHILD LESS THAN ONE YEAR OF AGE SHOULD BE ASSUMED TO BE A SIGN OF MALROTATION UNTIL PROVEN OTHERWISE.**

**Consult OSF Carehub for Assistance and Urgent Transfer  
1-800-252-5433**