

# ED GUAIAIC TESTING

## *There is no indication for Fecal Occult Blood Testing from the Emergency Department.*

**Background:** Many of us were trained to obtain Fecal Occult Blood Testing (FOBT, guaiac, hemoccult) testing for any patient with trauma, gi bleed, or anemia. We have checked thousands of guaiacs for these patients. Unfortunately, this once axiomatic practice is inappropriate for ED or inpatient testing. The guaiac/FOBT was developed to detect small amounts of blood in stool to screen for cancer, and has been replaced even for that indication by immunologic testing. The test characteristics of FOBT, which are inadequate for acute gi bleed testing, are even worse after a digital rectal exam. ED evaluation of potential Acute GI Bleeding should depend on other presenting features.

**What is Fecal Occult Blood Testing?** Guaiac FOBT is a screening test for colorectal cancer done in the ambulatory population. Three separate samples are sent from separate stools using an applicator to apply sample to card, not by digital rectal exam.

### **Why FOBT continues to be done inappropriately.**

- It is quick and easily done.
- Non-invasive compared with EGD.
- There is a perception that gastroenterology finds this information useful (they don't).

### **Why FOBT is not appropriate for GI Bleed / Anemia evaluation.**

#### False Positives:

- Ingested blood (epistaxis, gingival bleeding, pharyngitis)
- Mucosal inflammation (esophagitis, gastritis, ibd)
- Medications (NSAIDS, anticoagulants, antiplatelets, iron supplements, asa)
- Diet (red meat, broccoli, cauliflower, EtOH)

#### False Negatives:

- Antioxidants (Vitamin C)
- Denatured UGIB blood.



**What you should do instead.** Obtain a thorough history, physical and DRE to examine stool. This information is much more helpful. For example:

- Observed Melena (LR 25 for UGIB)
- Self-reported Black/Tarry stool (LR >5)
- BUN/Cr ratio > 30 (LR 7.5)

### **References / Further Reading:**

Gupta A, Tang Z, Agrawal D. **Eliminating In-Hospital Fecal Occult Blood Testing: Our Experience with Disinvestment** The American Journal of Medicine. 2018; 131(7):760-763.

Drescher MJ, Stapleton S, Britstone Z, Fried J, Smally AJ. **A Call for a Reconsideration of the Use of Fecal Occult Blood Testing in Emergency Medicine.** J Emerg Med. 2020 Jan 8:S0736-4679(19)30809-1. doi: 10.1016/j.jemermed.2019.09.026. Epub ahead of print. PMID: 31926780.

Narula N, Ulic D, Al-Dabbagh R, et al. **Fecal Occult Blood Testing as a Diagnostic Test in Symptomatic Patients is not Useful: A Retrospective Chart Review** Canadian Journal of Gastroenterology and Hepatology. 2014; 28(8):421-426.