

Hemoccult® Single Slides

Screening Test For Fecal Occult Blood



TRAINING AND COMPETENCY ASSESSMENT

UNIVERSITY OF CHICAGO MEDICINE

POINT-OF-CARE TESTING

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Background on How Hemoccult Test Works



The Hemoccult[®] test is a rapid, convenient and qualitative method for detecting fecal occult blood, which may be indicative of gastrointestinal disease. It is not a test for colorectal cancer or any other specific disease. It is for used as a diagnostic aid during examinations, to monitor for bleeding in patients with iron deficiency anemia, peptic ulcer, ulcerative colitis, and other conditions.

The Hemoccult[®] test is based on the oxidation of guaiac by hydrogen peroxide to a blue-colored compound. The heme portion of hemoglobin, if present in the fecal specimen, has peroxidase activity which catalyzes the oxidation of alpha-guaiaconic acid (active component in guaiac paper) by hydrogen peroxide (active component of the developer) to form a highly conjugated blue quinone compound. The Hemoccult slide contains a specially prepared, stabilized guaiac paper and is ready for use without additional preparation.

Materials and Reagents



- Patient Envelopes with instructions for diet and sample collection
- Hemocult Product Instructions
- Hemocult Developer
- Hemocult Slides (Test Cards)
- Applicator Sticks



Storage and Stability



- Store all test components at controlled room temperature (15 to 30° C) in original packaging
- Protect slides (Test Cards) from heat and light
- Do not store near volatile chemicals
- Do not use after expiration date
- Use Hemocult Developer (**yellow** and **green** striped label with yellow bottle cap) only with Hemocult slides. **Do not interchange** with Hemocult II[®] SENSEA test reagents which are identified by **blue** and **green** striped packaging

Specimen Collection and Patient Instructions

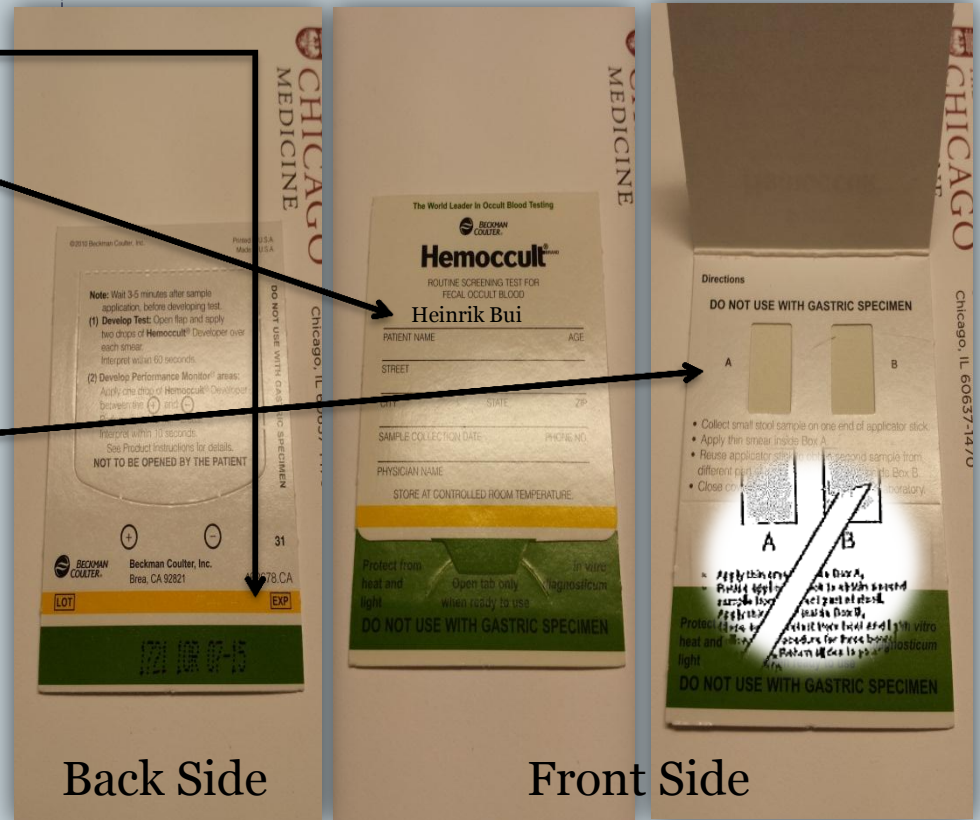


- Provider preformed specimen collection
- Patient Preparation
 - Eat a well balanced diet, with the following exceptions:
 - ✦ Avoid 7 days prior to and during the test period:
 - Non-steroidal anti-inflammatory drugs such as ibuprofen, naproxen, or aspirin (more than one adult aspirin a day)
 - ✦ Avoid 72 hours prior to and during the test period:
 - Vitamin C in excess of 250 mg per day, Red meat, processed meats and livers, and Some raw vegetables and fruits that are high in peroxidase (horseradish, turnips, melons, and radishes)

Test Procedure

Preparing the Test

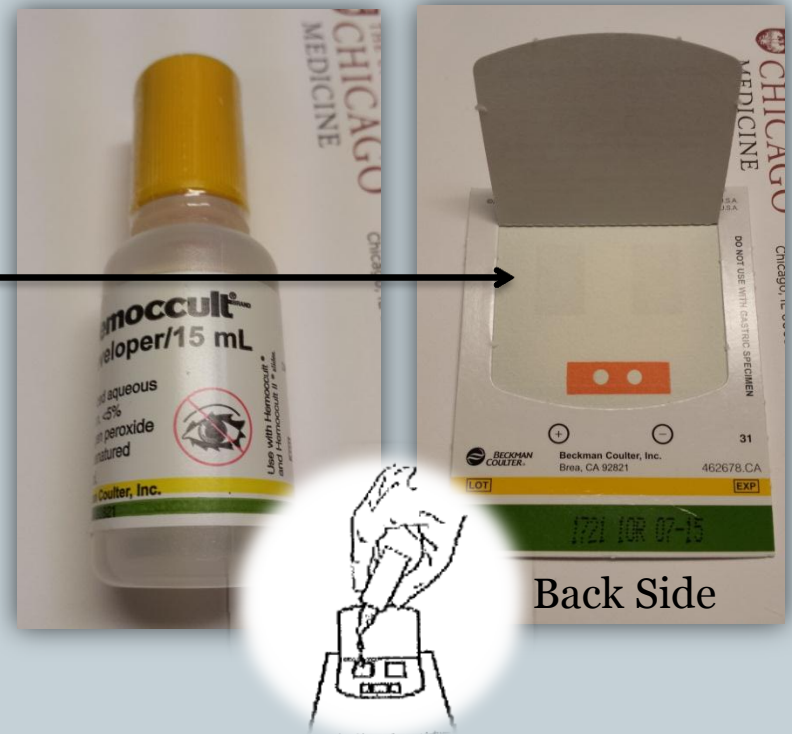
1. Check expiration date
2. Label slide card with patient name on front of the card in space provided
3. Put on gloves
4. Open the Hemoccult slide packet
5. Using an applicator stick, collect small fecal sample
6. Apply thin smear covering Box A
7. Reuse applicator to obtain second sample from a different part of feces. Apply thin smear covering Box B
8. Close cover flap. Dispose of applicator in waste container
9. Wait 3 to 5 minutes to let sample react with guaiac paper



Test Procedure

Developing the Test

10. Open back of slide and apply two drops of Hemoccult Developer to guaiac paper directly over each smear (Box A and Box B)
11. Read results within 60 seconds. Observe specimen for color change. Any trace of **blue** on or at the edge of the smear is positive for occult blood.



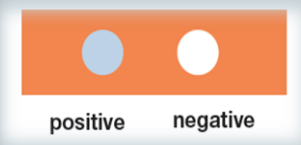
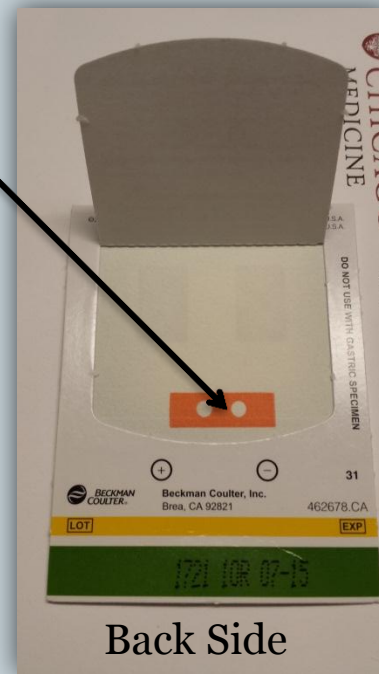
Test Procedure

Developing the Performance Monitors (Internal Quality Control)

12. Apply one (1) drop of Hemocult Developer between the positive (+) and negative (–) Performance Monitors areas
13. Read results within 10 seconds
14. If the slide developer is functional, a blue color will appear in the positive performance monitor and no blue color will appear in the negative performance monitor

Should internal quality controls (QC) fail to perform properly, specimen collection and test procedure must be repeated with new slide card.

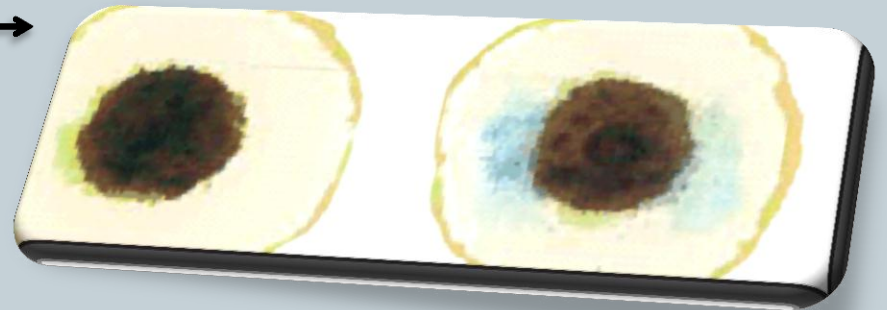
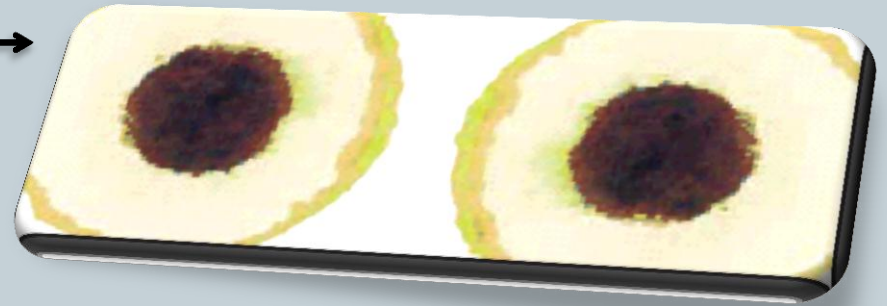
If internal QC fail again, obtain new lot # of slides and new lot # of developer. Repeat the test. Record the corrective action on Hemocult Quality Control Log. Notify manufacturer and return failed lot of slides and developer to the manufacturer.



Interpretation

Patient Result

- **Negative** —————→
 - No detectable blue on or at the edge of the smears indicates the test is negative for occult blood.
- **Positive** —————→
 - Any trace of **blue** on or at the edge of one or more of the smears indicates the test is positive for occult blood.



Review



- Slide cards are sensitive to heat and light, similar to developer must store at room temperature. Keep developer away from heat and tightly capped when not in use. It is flammable and subject to evaporation.
- Wait 3-5 minutes before applying developer directly over each smear
- Read test results within 60 seconds
- Then develop the on-slide performance monitor (internal quality control) by applying one drop of developer between the positive and the negative Performance Monitor areas on the back of the slide card. Read the results within 10 seconds
 - Positive (+) should be blue
 - Negative (–) should be colorless
- If performance monitor results are expected, record results in appropriate log
- If performance monitor results are not as expected, take appropriate action
 - Repeat using new slide card, or new card from new box, and/or new developer