Purpose

To determine presence of blood in stools. This is classified as a definitive test. This procedure is to be used by physicians and mid-level providers in BMH and BVH Emergency Room only.

General Information

Follow procedure exactly as outlined. The Seracult and Hemoccult slides contain specially prepared guaiac-impregnated paper and are ready for use without additional preparation. A small sample of stool specimen is applied to the slide. The application of developer creates a reaction between the guaiac and hemoglobin if present in the stool. This reaction turns the test paper blue within 60 seconds if occult blood (hemoglobin) is present.

Specimen Collection and Handling

1. Whenever practical, patients should be placed on a meat-free, low peroxidase, high residue diet starting two days before and continuing through the test period. See package insert for special diet instructions.
2. Collect a small stool sample on one end of applicator. A sample only the size of a match head, thinly applied, is necessary.
3. If testing will be performed immediately, wait 3- 5 minutes before adding developer.
4. The slides may be prepared and stored for up to 8 days at room temperature.
5. Patients with bleeding from other conditions may affect test results (e.g., hemorrhoids, menstrual bleeding, hematuria) and are not appropriate test subjects while such bleeding is active.

Limitations of Procedure

1. Intact RBC's may cause a false negative result.
2. Some oral medications (i.e., iron, aspirin, indomethacin, phenylbutazol, corticosteroids, reserpine, etc.) can cause GI irritation and occult bleeding in some patients and should be discontinued two days prior to and during test.
3. Ascorbic acid can give false negative results.
4. Therapeutic doses of iron can yield false positive results.
5. **Do not interchange different brands of developer with different slides.**

Expected Values

Negative

Reagent Storage

Slides

- Do not use product after expiration date imprinted on each slide and printed on each box.
- Test is not valid if the internal quality control test does not yield a blue color.
- Store at room temperature between 59-86^{o}F.
- Do not refrigerate.

- Slides should be protected from heat, sunlight, fluorescent light and ultra-violet radiation.
- A light blue discoloration of the normally light amber paper may occur if slides are not stored under recommended conditions. This does not affect the performance of the test.

Developer

- Do not use product after the expiration date printed on each developer bottle.
- Do not ingest.
- The developer is flammable; keep away from open flame.
- The developer is an irritant; avoid contact with eyes and skin. (If contact occurs, flush the affected area with water.)
- Store at room temperature (59-86^{o}F).
- Do not refrigerate or freeze.
- Keep away from heat and light.

Requisites

Specimen collection receptacle
Applicator
Developer - Seracult or Hemoccult
Test slide - Seracult or Hemoccult

Procedure

1. Check expiration date on slide and developer.
2. Collect small stool sample on one end of applicator.
3. Apply thin smear inside box A.
4. Reuse applicator to obtain second sample from different part of stool. Apply thin smear inside box B.
5. Close cover.
6. Open flap in back of slide and apply two drops of developer to guaiac paper directly over each smear.
7. Read results within 60 seconds. Any trace of blue on or at the edge of the smear is positive for occult blood.
8. Perform quality control procedure (see below). IMPORTANT NOTE: Always develop the test, read and interpret the results, and make a decision as to whether the fecal specimen is positive or negative for occult blood BEFORE you develop the internal quality control.

Quality Control

The Performance Control Area (for Seracult) and the Performance Monitors (for Hemoccult) on the slides provide the internal quality control indicator. The internal control test should be performed on each test slide and documented on the laboratory log or in the patient record as QC = OK. Follow procedure below.

1. Perform internal quality control procedure only after patient test area has been developed, read, and interpreted. Any blue color originating from the Performance Control Area (Seracult) or Performance Monitors (Hemoccult) should be ignored in reading of specimen test results.
2. Apply ONE DROP ONLY of developer to the line at the Performance Control Area on the Seracult test slide. For the Hemoccult slide, apply ONE DROP of developer between the Positive and Negative Performance Monitors.
3. A blue color should appear in the Performance Control Area within 30 seconds if the Seracult slides and developer are functional. For Hemoccult, the blue color should appear in the Positive Performance Monitor only, and no blue color should appear in the Negative Performance Monitor.
4. If the internal quality control does not demonstrate expected results, redo entire test with new slide and developer.

Results Documentation

The following information must be documented for each test: date of testing, patient name and birth date, test result, internal quality control (Performance Control or Performance Monitor) result, and identification of person performing test.

1. If a laboratory log is used, fill in all specified information, indicate the patient test result (positive or negative), and indicate "OK" in the Internal Control column if the Performance Control Area (for Seracult) or Performance Monitors (for Hemoccult) demonstrated the expected blue color.
2. If results are only recorded in the patient chart/record, there must be documentation that the internal QC was verified.
3. If the expected blue color is not obtained from the internal control, repeat the test if possible. Do not record patient results of *this* test in the chart.

References

1. Propper Seracult Plus Package insert

Prepared: Henry Sell, MT(ASCP)
Medical Director: Jeffrey Pearson, MD

Approvals:

All approvals are maintained and controlled in the MasterControl ™ system.
Please refer to the MasterControl ™ system for the current controlled revision and approval records

Revision History:

Date	Revision	Description of changes
08/13/2010	2	Revised headers and footers for MasterControl documents
08/17/2011	3	Minor revision of header and footer

Draft and Archived/Obsolete revisions are not to be used.
Access MasterControl system to verify revision