

OREGON HEALTH & SCIENCE UNIVERSITY
Hospitals and Clinics
Point of Care

**Occult Blood, Gastric Fluid
by SmithKline Gastrocult[®] Slide Kit**

Principle

The Gastrocult Test is a rapid screening test used to determine pH and to detect blood in gastric aspirates or vomitus. The test is used as an aide in the diagnosis and management of various gastric conditions. The identification of occult blood can be useful in the early detection of gastric trauma, while the pH may be useful in evaluating antacid therapy.

A gastric specimen is placed on the slide, which consists of guaiac-impregnated paper. The developer is added and hemoglobin, if present, is converted to a guaiacone structure, which produces a blue dye in 30-60 seconds.

Specimen Requirements

1. Gastric aspirate obtained by nasogastric intubation or vomitus.
2. Sample must be tested immediately.
3. Do not test other sample types using the Gastrocult Slide Kit. The kit is specific for gastric samples.

Interferences

1. Many foods, such as, incompletely cooked meat and raw fruits and vegetables may produce false positive results.
2. Antacids and ascorbic acid may produce false negative results.
3. Some normal individuals may produce very faint positive Gastrocult test results.

Reference Range:

1. Negative

Alert Values

1. Notify provider with positive results and document in patient chart.

Quality Control

1. Each Slide contains a built-in control (Performance Monitor Area), which ensures that the reagents and test procedure are functioning properly. Test the Performance Monitor Area on one slide when a new box is opened.
2. Apply a drop of developer to the Performance Monitor Area and read the result within 30 seconds.
3. The positive Performance Monitor Area should appear blue and the negative Performance Monitor Area should remain white.
4. Record the date, your initials, lot number and expiration date, and results on the Quality Control (QC) logsheet in the POCT QC Logbook.
5. If QC fails, repeat QC using a new slide. If repeat QC fails, do not perform patient testing. Contact Point of Care at 4-5497. Document all action taken on the QC logsheet.

Procedure

1. Open the cover on the slide and apply one drop of gastric sample to the occult blood test area and one drop of gastric sample to the pH test circle.
2. At 30 seconds, read the pH by comparing the pH test circle to the pH color chart.
3. Apply two drops of developer on the patient occult blood test area and one drop of developer on the Performance Monitor Area.
4. Read the Performance Monitor Area within 30 seconds and the patient occult blood test area within 60 seconds.
5. The positive Performance Monitor Area must turn blue and the negative Performance Monitor Area must remain white for the test result to be valid.
6. Do not read slide past 60 seconds or results may be invalid.
7. The pH test circle can be used for pH testing of any specimen that would fall in the appropriate range of the Gastroccult card.
8. The Performance Monitor Area must be tested each time a patient test is performed.

Results Reporting

1. Any trace of blue, in the patient test area, is positive for occult blood.
2. Record patient result in the patient's chart, computer clinical record, or patient logsheet.

3. Internal QC must be recorded with the results in the patient's medical record as "passed".

Reagents

1. Gastrocult Slides:
 - a. Slides are stable at room temperature (15^o-30^oC) until the expiration date on the slide.
 - b. Keep slides sealed in special wrapper until ready for use.
 - c. Do not refrigerate or freeze.
 - d. Slides contain filter paper impregnated with natural guaiac resin.
2. Gastrocult Developer:
 - a. Developer solution is stable at room temperature (15^o-30^oC) until the expiration date on the vial.
 - b. Do not refrigerate or freeze.
 - c. Protect from heat and keep bottle tightly capped when not in use.
 - d. The developer is a stabilized mixture of hydrogen peroxide and ethanol.
 - e. Developer is an irritant. Avoid contact with skin and eyes. Should contact occur, rinse promptly with water.

References

1. Gastrocult Slide Kit package insert, SmithKline Diagnostics, INC.

Reviewed 12/7/10