FECAL OCCULT BLOOD TEST

Patient: How is the fecal occult blood test used?
Doctor: The main use for the fecal occult blood test (FOBT) or the fecal immunochemical test (FIT) is as a screen for early colon cancer. Blood in the stool may be the only symptom of early cancer; thus, if detected early, treatment can begin immediately, improving the chance of a cure. The FOBT is not diagnostic for cancer but, if positive, requires other follow-up procedures to find the source of the bleeding that may indicate other gastrointestinal problems. A secondary use of FOBT is to determine the cause of anemia, such as blood loss from a bleeding ulcer.
Patient: When is it ordered?
Doctor: It is most often done as part of a routine examination. The tests are used primarily as a screening tool for early detection of colon cancer. They are recommended to be done annually beginning at age 50 or as directed by the doctor based on a person's family medical history. Most people who have them performed are asymptomatic. A doctor may sometimes order an FOBT when someone has unexplained anemia that might be caused by bleeding in the digestive tract.
Patient: What is being tested?
Doctor: It checks for hidden blood in the stool. Normally, only very small amounts of blood may be lost from the stomach or intestines during digestion. This blood cannot be seen in the feces and does not produce a positive result on a fecal occult blood test. However, polyps, finger-like growths that protrude into the intestinal cavity or in the rectum, can be fragile and bleed intermittently, such as when food waste brushes against them. The blood released is not usually visible in the stool but can be detected with a fecal occult blood test. Benign polyps are relatively common in people over the age of 50 but can become cancerous and potentially spread to other parts of the body. Most cases of colon cancer begin with the development of benign intestinal polyps. As a result, blood in the stool may indicate the presence of these polyps, which, if not attended to, may progress to cancer. Often, this small amount of blood is the first and sometimes the only sign of early colon cancer, making the fecal occult blood test a valuable screening tool for colorectal (colon and rectal) cancer.
Patient: Are there different methods in doing it?
Doctor: Yes, there are a few different methods that can be used for fecal occult blood testing:
The guaiac smear method (gFOBT)—this method uses a chemical indicator that shows a color change in the presence of blood. It is recommended that the newer, high-sensitivity tests be used.
An over-the-counter (OTC) flushable reagent pad/tissue method
Immunochemical method (iFOBT or FIT)—this method uses antibodies directed against human hemoglobin to detect blood in the stool.
Patient: How is the sample collected for testing?
Doctor: Each method has a different approach to collecting and testing stool samples for occult blood.
Patient: Ok. So can you tell me how the sample is collected for the guaiac-based test?
Doctor: Ok, the doctor or laboratory will typically provide three test cards. Separate stool samples are collected from different bowel movements, usually on three consecutive days. For each test, a stool sample should be collected into a clean container and should not be contaminated with urine or water. A test card is labeled with the person's name and the date; then, with an applicator stick, a thin smear of stool is put onto a designated area on the card and allowed to dry. Once it is dry, it is stable for several weeks at room temperature. When all of the consecutive samples have been collected and dried, the test cards are returned to the doctor/laboratory, usually by mailing them.
Patient: How about for the flushable method?
Doctor: A test pad/tissue is placed in the toilet after a bowel movement. The pad contains a chemical that produces a color change when blood is present. The person doing the test watches for the characteristic color change and records the findings on a report form. Like the gFOBT, this test is usually done on three consecutive days and then the completed form is returned to the doctor. Be aware that use of toilet bowl cleansers or the presence of blood derived from urine or a woman's menstrual period may alter results.

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Patient: And the immunochemical tests?
Doctor: The collection method may vary based on the specific manufacturer. A common approach is to use a special long-handled brush or other device to collect a sample from the surface of a stool sample. The brush or device is then used to transfer the sample to a special collection card. After the card is allowed to dry, it is returned to the doctor or laboratory. At least three such samples are collected on different days and sent in one mailing.
Patient: What does the test result mean?
Doctor: For the guaiac-based FOBT, a positive test result indicates that abnormal bleeding is occurring somewhere in the digestive tract. This blood loss could be due to ulcers, diverticulosis, bleeding polyps, inflammatory bowel disease, hemorrhoids, blood swallowed due to bleeding gums or nosebleeds, or due to benign or cancerous tumors.
For the fecal immunochemical test, a positive result indicates abnormal bleeding in the lower digestive tract. Since this test detects only human hemoglobin, other sources of blood, such as from the diet, do not cause a positive result. Moreover, hemoglobin from bleeding in the upper digestive tract is broken down to other elements before it reaches the lower digestive tract and is not detected by the FIT. Thus, the FIT is a more specific test than gFOBT.
A positive result from either the guaiac-based or immunochemical FOBT requires follow-up testing. This usually involves an imaging procedure such as sigmoidoscopy or colonoscopy.

QUESTIONS:

1. **In your own words, explain how the test is done.**
2. **Other than stool exams, are there other ways to check for colon cancer?**
3. **Why do you think the stool should be collected in 3 consecutive days? Why not 3 stool samples in one day?**