

TESTING FAECES FOR OCCULT BLOOD

Principle :

Haemoglobin and its derivatives catalyze the transfer of oxygen from hydrogen peroxide to aminophenazone . Oxidation of the 4-aminophenazone produces a blue color.

Reagents :

1-	Acetic acid Alcohol 4-Aminophenazone
2-	Hydrogen peroxide (H ₂ O ₂) solution*

Specimen :

Two days before collecting the faeces, instruct the patient not to ingest red meat, fish, turnips, spinach, horseradish. Also withdraw drugs, vitamins, and fruit juices that contain ascorbic acid, iron, barium sulphate, cimetidine, and also cough medicine. The patient should eat plenty of vegetables, corn, and non-citrus fruit.

False reaction :

A false positive reaction may occur if the faeces contains peroxidase - like substances. Such reaction may be avoided by dietary restriction (see Specimen) .

A false negative reaction may be obtained if the faeces contains a high concentration of ascorbic acid.

Interpretation of results :

The commonest causes of positive occult blood tests in tropical and other developing countries are hookworm infection, peptic ulcer, and bleeding from oesophageal varices due to cirrhosis of the liver .

Other causes include carcinoma in the gastrointestinal tract, erosive gastritis due to alcohol or drugs, or swallowed blood from recurrent nosebleeds.

Procedure :

Sample preparation :

Add a sample of faeces about 10-15 mm in diameter (taken from various parts of the specimen). Using a glass or plastic rod, emulsify the faeces in 5 ml water. Allow the faecal particles to settle or centrifuge the emulsified specimen.

	Sample (ml)	Negative Control (ml)	Positive Control (ml)
Emulsified faeces	2.0	-	-
Distilled water	-	2.0	2.0
Whole blood	-	-	0.02

Mix well. Layer the following (Do not mix)

R1	1.0	1.0	1.0
(R2) H ₂ O ₂	0.5	0.5	0.5

Allow to stand for one min . Look for the appearance of a blue color where the aminophenazone reagent meets the sample or control solution.

Report the results as follows :

No color change	Negative test
Pale pink	Positive+
Dark pink	Positive ++
Pink-black	Positive +++

Negative control : This should show no color change

Positive control : This should show a positive reaction

Note: If the test is negative but there is high clinical suspicion, two further specimen should be tested to detect bleeding which may be intermittent.

BIO DIAGNOSTIC

DIAGNOSTIC AND RESEARCH REAGENTS

TESTING FAECES FOR OCCULT BLOOD

+4 to +8°C 50 Tests
In vitro diagnostic use

CAT. No. OB 24 12

REAGENTS

R1 Chromogen 1 x 50 ml
R2 H₂O₂ 1 x 25 ml

CONTACTS

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