Test Definition: OAPNS

Ova and Parasite, Microscopy, Varies

Overview

Useful For

Detecting and identifying parasitic protozoa and eggs and larvae of parasitic helminths

Reflex Tests

Test Id	Reporting Name	Available Separately	Always Performed
BCON	Concentrate Exam	No, (Bill Only)	No
BDIR	Direct Prep Exam	No, (Bill Only)	No
BTRI	Stain Slide Exam	No, (Bill Only)	No
FILB	Filaria Bill Only	No, (Bill Only)	No

Testing Algorithm

Reflex testing will be added and performed at an additional charge by the laboratory based on the following criteria:
-Specimen source
-Specimen type: Unpreserved, refrigerate versus preserved
-Indication of parasites suspected

Method Name

Microscopic
May include Touch/Tease Preparation, Direct Wet Preparation, Concentrated Wet Preparation, Permanent (Trichrome or Giemsa) Stained Preparation

NY State Available

Yes

Specimen

Specimen Type

Varies

Ordering Guidance

If specimens are suspected of containing tapeworm segments or other adult worms or worm segments, place the suspected worm in 70% alcohol and order PARID / Parasite Identification, Varies.

If microsporidia are suspected:
-For non-stool/non-urine specimen, order MTBS / Microsporidia Stain, Varies
-For feces or urine, order LCMSP / *Microsporidia* species, Molecular Detection, PCR, Varies

If pinworm is suspected, order PINW / Pinworm Exam, Perianal. Perianal skin sampling using clear cellophane tape or a

SWUBE device is required for this test.

Urine specimens should be sent for SHUR / *Schistosoma* Exam, Random, Urine or TVRNA / *Trichomonas vaginalis*, Nucleic Acid Amplification, Varies as applicable.

If scabies is suspected, submit skin scrapings and order PARID / Parasite Identification, Varies.

For preserved stool analysis, order OPE / Ova and Parasite, Travel History or Immunocompromised, Feces.

Necessary Information

1. Specify on the order if a specific parasite is suspected.
2. Indicate source on the label of the specimen.

Specimen Required

Submit only 1 of the following specimens:

Specimen Type: Bile
Container/Tube: Sterile container
Specimen Volume: Entire collection
Specimen Stability Information: Refrigerate 5 days

Specimen Type: Bone marrow
Container/Tube: Lavender top (EDTA) and/or slides
Specimen Volume: 4 mL EDTA and/or 1 slide (unstained preferred)
Collection Instructions:
1. Bone marrow and/or slides will be accepted for this test.
2. If submitting slides with EDTA tube, label and bag specimens together. Send refrigerate as one collection.
Specimen Stability Information: Refrigerate 5 days

Specimen Type: Colonic washing
Container/Tube:
Preferred: ECOFIX preservative
Acceptable: 10% Buffered formalin AND zinc polyvinyl alcohol (Zn PVA) (one vial of each)
Specimen Volume: at least 2 mL
Collection Instructions:
1. Place specimen into preservative within 30 minutes of collection.
2. Follow instructions on the container as follows:
a. Colonic washings should be placed into ECOFIX preservative vial (or 10% formalin and Zn-PVA vials) in a ratio of 1 part preservative:1 part specimen. Some preservative may need to be removed from the vial to maintain this ratio.
b. Place washings into vial, twist the cap tightly closed, and shake vigorously until the contents are well mixed.
c. Do not fill above the fill line indicated on the preservative container.
Specimen Stability Information: Ambient (preferred)/Refrigerate 5 days

Specimen Type: Duodenal aspirate
Preferred: ECOFIX preservative
Acceptable: 10% Buffered formalin AND Zn PVA (one vial of each)

Specimen Volume: at least 2 mL
Collection Instructions:
1. Place specimen into preservative within 30 minutes of collection.
2. Follow instructions on the container as follows:
a. Duodenal aspirate should be placed into ECOFIX preservative vial (or 10% formalin and Zn-PVA vials) in a ratio of 1 part preservative:1 part specimen. Some preservative may need to be removed from the vial to maintain this ratio.
b. Place washings into vial, twist the cap tightly closed, and shake vigorously until the contents are well mixed.
c. Do not fill above the fill line indicated on the preservative container.
Specimen Stability Information: Ambient (preferred)/Refrigerate 5 days

Specimen Type: Spinal fluid
Container/Tube: Sterile container
Specimen Volume: At least 1 mL
Specimen Stability Information: Refrigerate 5 days

Specimen Type: Fluid, abscess, drainage material
Sources: Abdominal, ascites, brain, cyst (must specify anatomical location of cyst), liver, lymphatic, peritoneal, splenic
Container/Tube: Sterile container AND either ECOFIX preservative vial or one zinc (Zn)-PVA AND one 10% formalin vial
Specimen Volume: 15 mL
Collection Instructions:
1. Place half of collection into preservative (either ECOFIX or PVA and 10 % Formalin combo) in a ratio of 1 part preservative: 1 part specimen. Some preservative may need to be removed from the vial to maintain this ratio.
2. Label the preservative type on the side of each vial.
3. Place other half of collection in a sterile container.
3. Label both specimens, bag together, and send refrigerate as one collection.
Specimen Stability Information: Refrigerate 5 days

Specimen Type: Respiratory
Source: Bronchial washing, bronchoalveolar lavage, sputum
Container/Tube: Sterile container
Specimen Volume: Entire collection
Specimen Stability Information: Refrigerate 5 days

Specimen Type: Tissue
Sources: Bladder, brain, colon, intestine, liver, lymph node, lung, muscle, rectal, spleen (must specify anatomical location of tissue)
Container/Tube: Sterile container
Specimen Volume: 5 to10 mm
Collection Instructions: Place specimen in sterile container with 1 to 2 drops of sterile saline to keep tissue moist.
Specimen Stability Information: Refrigerate 5 days

Forms

If not ordering electronically, complete, print, and send a Gastroenterology and Hepatology Test Request (T728) with the specimen.

Specimen Minimum Volume

Respiratory specimens, spinal fluid, abscess, or drainage material: 0.5 mL
Tissue: 3 mm
Other specimen types: See Specimen Required

Reject Due To

Preservative other than Ecofix or 10% formalin and zinc polyvinyl alcohol (Zn-PVA)	Reject
Broken or cracked unstained slides	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Refrigerated	5 days	

Clinical & Interpretive

Clinical Information

A variety of different parasites may be found in specimens other than stool (eg, colonic washings, duodenal aspirates, other anatomical site washings or aspirates, respiratory specimens, liver cyst aspirates or abscesses, and tissues). These parasites may include protozoa (microscopic unicellular eukaryotes) and helminths (worms). Infection is often asymptomatic but possible signs and symptoms of infection may include cough, fever, bloody sputum, skin lesions, and abdominal pain.

Reference Values

Negative
If positive, organism identified.

Interpretation

A positive result indicates the presence of the parasite but does not necessarily indicate that it is the cause of the patient's symptoms. Some strains of protozoa are nonpathogenic, and some helminths cause little or no illness.

Cautions

This test is not appropriate for the detection of microfilariae, malaria, trypanosomes, or *Trichomonas vaginalis*.

Broken or cracked unstained slides are not compatible with the instrumentation used in our performing laboratories and will be rejected. Additional material may be requested.

Clinical Reference

1. Garcia LS. Diagnostic Medical Parasitology. 6th ed. ASM Press; 2016
2. Pritt BS. Parasitology Benchtop Reference Guide. 2nd ed. CAP; 2017

Performance

Method Description

Different specimen sources may potentially harbor different types of parasites. A portion of the submitted specimen, depending on the type of specimen and what organism may be specifically suspected, may be examined by direct wet prep slide, tease or touch prep slides, concentrated for wet prep exam, or stained by trichrome stain, Ecostain, or Giemsa stain.(Unpublished Mayo method)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

4 to 5 days

Specimen Retention Time

7 days

Performing Laboratory Location

Mayo Clinic Laboratories - Rochester Main Campus

Fees & Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. It has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

87015-Concentration (any type), for infectious agents (if appropriate)
87209-Smear, primary source with interpretation; complex special stain (eg, trichrome, iron hematoxylin) for ova and

parasites (If appropriate)
87210-Wet mount for infectious agents (if appropriate)
87207-Smear, primary source, with interpretation; special stain for inclusion bodies or intracellular parasites (if appropriate)

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
OAPNS	Ova and Parasite, Microscopy, Varies	673-4

Result ID	Test Result Name	Result LOINC® Value
OAPNS	Ova and Parasite, Microscopy, Varies	673-4