

India Ink Wet Mount for Cryptococcus		Page 1 of 2
DOC#: MIC 1108	Section: Microbiology	Date: September 6, 2023

PURPOSE:

India Ink wet mounts are used for the visualization of encapsulated microorganisms such as *Cryptococcus neoformans*. The capsule of *Cryptococcus* will exclude the particles of ink and appear as clear halos around the organism.

SCOPE:

This policy applies to UPMC Hanover,

POLICY:

If *Cryptococcal* infection is suspected in spinal fluid (CSF), a one to one suspension of the specimen is prepared in a drop of India Ink and reviewed for presence or absence of encapsulated yeast.

An India Ink wet mount may also be used for other body fluids or from culture.

EQUIPMENT/MATERIALS:

Sterile plastic pipette
Microscopes slides
Coverslip
India Ink
Microscope

SPECIMEN:

CSF or growth from agar plate.

QUALITY CONTROL:

Controls are performed with each patient test.

India Ink negative control (Scientific Device Laboratory)
India Ink positive control (Scientific Device Laboratory)

Store at room temperature (15°C to 30°C)

PROCEDURE:

1. Setup the specimen in the LIS for culture and India Ink.
2. Handle the specimen in the hood (BSC).
3. Using a sterile plastic pipette, remove a drop of CSF and mix it with a small drop of India Ink on a microscope slide. Coverslip the specimen.
4. Repeat step 3 using positive and negative controls.
5. Examine the slides at 10X (low power) to 40 X magnification, reducing the light source. *Cryptococcus* will appear as a yeast surrounded by a halo like capsule. Refer to listed references for photographs.
6. Report presence or absence of *Cryptococcus* after comparing the positive and negative controls. Document controls on the appropriate log sheet.

India Ink Wet Mount for Cryptococcus		Page 2 of 2
DOC#: MIC 1108	Section: Microbiology	Date: September 6, 2023

7. To examine a colony from culture, add a drop of sterile water to a slide, a minute amount of growth, mix well and examine as above.
8. If specimen is positive, report presence in the LIS and call to the floor or physician as a critical report. Document in the Communications log. For inpatients, notify Infection Prevention.

LIMITATIONS:

Artifacts such as erythrocytes, leukocytes, talc particles from gloves or bubbles may displace the India Ink Suspension and resemble yeast. Careful examination of the India Ink mount for properties consistent with *C. neoformans* is extremely important.

Interpretation may be hindered if the preparation is too thick, blocking transmission of light.

REFERENCES:

Fisher, Fran M.Ed, MT(ASCP), Cook, Norma B. MA MT(ASCP). Fundamentals of Diagnostic Mycology. Saunders 1998. p.213.

Jorgensen, James H., Pfaller, Michael A, Editors in Chief. Manual of Clinical Microbiology, 11th edition. ASM Press. 2015. p, 1957, 1990.