



CYTOPATHOLOGY

SPECIMEN COLLECTION GUIDE

BRUSHINGS

TEST INFORMATION

Microscopic examination for cytologic abnormalities, and aid in diagnosis of certain infections.

PREPARATION OF THE PATIENT

Follow your facility's procedure.

MATERIALS NEEDED

Cytology fixative container

Cytology requisition

Biohazard bag

Glass slides for smears

Plastic slide transport container or slide transport container containing 95% alcohol

Chemical resistant marker

LABELING AND PAPERWORK

1. Fill out cytopathology requisition. Please include any pertinent clinical history.
2. Attach or fill out patient billing/insurance information.
3. Label container(s) and slide(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker.

COLLECTION INSTRUCTIONS

1. Roll the brush over a labeled glass slide and either air dry and place the slide into a dry slide transport container or place slide immediately into a slide transport container with 95% alcohol.
2. Swirl the brush into the labeled cytology fixative container rubbing it against the sides of the container several times and drop the brush inside the container.
3. Ensure all slides are properly labeled and placed in slide transport containers.
4. Ensure container is properly labeled and tightly sealed.
5. If cultures are needed, please perform under sterile conditions at time of collection and send to your preferred clinical laboratory.

6. Put specimen container(s) and slides into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag.
7. Store at room temperature.
8. Fill out appropriate Specimen Log Sheet.
9. Transport to lab via courier or shipping service.

LIMITATIONS

Incorrect or insufficient fixative can limit interpretation. Inadequate specimen can limit interpretation.

REJECTION CRITERIA

1. Category A infected specimen (CJD).
2. The specimen is not received from a licensed authorized source.
3. The specimen was intended for another laboratory.
4. Unlabeled specimen container(s).

FLUID

TEST INFORMATION

Microscopic examination for cytologic abnormalities, and aid in diagnosis of certain infections.

PREPARATION OF THE PATIENT

Follow your facility's procedure.

MATERIALS NEEDED

Specimen container, minimum specimen volume 1-2 mL, maximum volume 1000mL

Cytology fixative container

Cytology requisition

Biohazard bag

Chemical resistant marker

LABELING AND PAPERWORK

1. Fill out cytopathology requisition. Please include any pertinent clinical history.
2. Attach or fill out patient billing/insurance information.
3. Label container(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker.

COLLECTION INSTRUCTIONS

1. Place the fluid in container.
 - a. **Body Fluid**- Second tap for body fluid is preferred if possible due to cell degeneration in long standing fluid. Send fresh without fixative and keep refrigerated until courier pickup. Tighten container lid.
 - b. **Miscellaneous Fluid for cytology** includes cerebrospinal fluid, washings, bronchoalveolar lavage, ocular fluid,

ovarian fluid, etc. Place the fluid in cytology fixative container with a maximum of a 2:1 ratio of specimen to fixative. Store at room temperature. Tighten container lid.

2. If cultures or other clinical tests are needed, please perform under sterile conditions at time of collection and send to your preferred clinical laboratory.
3. Put specimen container(s) into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag.
4. Fill out appropriate Specimen Log Sheet.
5. Transport to lab via courier or shipping service.

LIMITATIONS

Incorrect or insufficient fixative can limit interpretation. Inadequate specimen can limit interpretation.

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FINE NEEDLE ASPIRATION

TEST INFORMATION

Microscopic examination for cytologic abnormalities.

PREPARATION OF THE PATIENT

Follow your facility's procedure. Direct patient to avoid blood thinners (ibuprofen, aspirin) prior to procedure.

MATERIALS NEEDED

Cytology fixative container or RPMI (if hematolymphoid process is of concern)

Glass slides for smears

Plastic slide transport containers

Cytology requisition

Biohazard bag

Chemical resistant marker

LABELING AND PAPERWORK

1. Fill out cytopathology requisition. Please include any pertinent clinical history
2. Attach or fill out patient billing/insurance information.
3. Label container(s) and slides with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker.

COLLECTION INSTRUCTIONS

1. FNA Smears:

- a. Point the needle near the top 1/3 of a labeled slide. Using the plunger in the syringe, slowly express some of the aspirated material onto the slide to make a 3-5mm size dot.
- b. Place a complimentary labeled slide face down and perpendicular on top of the dot and carefully lift to separate the slides.
- c. Use a new spreader slide to smear the material down each of the slides by placing the spreader slide perpendicular onto the droplet, then gently draw the spreader slide down each slide to the lower 1/3 of the slide to smear the material like the below image:



- d. Let the slides air-dry and perform needle rinses.

2. Needle Rinses:

- a. Any remaining sample in the syringe should be ejected into the cytology fixative or RPMI container.
- b. After ejecting remaining material, rinse the needle 2x in cytology fixative or RPMI solution to get all diagnostic material out of the syringe.
- c. Discard needle into proper sharps container.
- d. Repeat for all passes.
- e. Repeat steps 1. for every pass followed by step 2.
- f. Discard the spreader slide at completion of the procedure into sharps container.
- g. Place completely dried, properly labeled slides into plastic slide transport container.
- h. Place the lid on the needle rinse container and tighten lid completely shut.

3. Core needle biopsy

- a. Place core biopsy into RPMI (if hematolymphoid process) or formalin.

4. If cultures or other clinical tests are needed, please perform under sterile conditions at time of collection and send to your preferred clinical laboratory.
5. Put specimen container(s) into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag.
6. Store at room temperature. Refrigerate and use ice pack for transport if submitting fresh (no fixative) or in RPMI.
7. Fill out appropriate Specimen Log Sheet.
8. Transport to lab via courier or shipping service.

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OTHER CYTOPATHOLOGY

TEST INFORMATION

Microscopic examination for cytologic abnormalities, and aid in the diagnosis of certain infections.

PREPARATION OF THE PATIENT

Follow your facility's procedure.

MATERIALS NEEDED

Specimen container, minimum specimen volume 1-2 mL, maximum volume 1000mL

Cytology fixative container

Cytology requisition

Plastic slide transport containers w/ 95% alcohol

Glass slides

Biohazard bag

Chemical resistant marker

LABELING AND PAPERWORK

1. Fill out cytopathology requisition. Please include any pertinent clinical history.
2. Attach or fill out patient billing/insurance information.
3. Label container(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker.

COLLECTION INSTRUCTIONS

1. **Sputum cytology.** Label container(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker. Place the fluid in cytology fixative container. Tighten container lid. Put specimen container(s) into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag. Store at room temperature.
2. **Miscellaneous Smear** includes: tzank smear, nipple secretion, lesion cytology, oral cytology, ocular cytology, etc. Label slide(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker. Collect smear per the facility procedure and fix smear immediately.
 - i. Fix the slide by placing in alcohol-filled transport container containing 95% alcohol.
 - ii. Ensure slides are labeled properly and place in slide transport container. Put slide transport container(s) into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag. Store in at room temperature.
3. **Anal/Rectal cytology.** Label container(s) with at least 2 patient identifiers (full name and date of birth) and the specimen source with a chemical resistant marker. Place the patient in a knee/chest or lateral position. This allows you to spread the anus gently. Have the fixative container open and nearby. Insert a non-lubricated swab or cytobrush 2-3cm into the anus. Move the swab in and out while rotating 360° before withdrawing. Withdraw the swab or brush and immediately place in fluid container and rotate 10 times while also pressing the swab/brush gently against the sides of the container. Discard the brush/swab. Tighten the lid of the container. Ensure container is properly labeled and tightly sealed. Put specimen container(s) and slides into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag. Store at room temperature.
4. If cultures or other clinical tests are needed, please perform under sterile conditions at time of collection and send to your preferred clinical laboratory.

5. Put specimen container(s) into the biohazard bag and close the bag. Place paperwork in the outer pocket of the biohazard bag.
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