

Cytology Specimen Collection and Preparation

POLICY STATEMENT

A cytology requisition must be completed for all cytology specimens submitted to pathology for evaluation. The requisition must contain the following: patient name, medical record number or date of birth, ordering physician, date and time of collection, pertinent history, and specimen source/site.

Handling of Cytology Specimens

All specimens (Gyn or Non-gyn) must be submitted in a properly-labeled container to include patient name, Social Security number/medical record number/date of birth.

- **Non-Gyn Cytology**

- Label all non-gyn smears with the patient's name, medical record number/birth date, and specimen source (eg, bile duct, duodenum, etc.) and side if applicable.
- All non-gyn smears must be properly fixed in 95% ethyl alcohol (not isopropyl) prior to delivery to the laboratory.
- All fluids and all other materials for non-gyn cytology should be brought to the laboratory immediately. If storage is necessary, cytology fixative may be mixed with the specimen. For best results, cytology smears should be made immediately after obtaining the specimen.
- Urine for cytology should consist of the **second-morning void** (discard first-morning void). The fresh specimen can be taken directly to the laboratory. Specimens should be refrigerated as soon as possible.

- **Brushing Cytology**

- After brushing the lesion, roll the brush onto a glass slide (label side up) moving from the label end of the slide to the opposite end.
- Try not to smear or slide across slide surface to avoid crushing the cells.
- Place slides immediately into container of 95% alcohol.
- If the slide is not placed entirely into alcohol within 3 seconds of making the smear, it may not be adequate for evaluation.
- Make 2 to 3 slides and then cut off and drop the disposable brush head into container of cytofixative (cytorich red), leaving at least 1 inch of wire on the brush.
- Close the lid tightly and shake vigorously for 5 seconds. If multiple passes/brushings of same lesion are made, then repeat same sequence as above for each pass. Additional brush heads from same lesion/area of suspicion may be placed in same single container of cytofixative.

- **Gyn Cytology**

- **Endocervical Brush/Spatula Method**

- Obtain an adequate sampling from the ectocervix using a plastic spatula. Rinse spatula as quickly as possible into the PreservCyt Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.
- To obtain an adequate sample from the endocervix using an endocervical brush device, insert the brush into the cervix until only the bottom most fibers are exposed. Slowly rotate one quarter to one half turn in one direction. **DO NOT OVER ROTATE.**
- Rinse the brush as quickly as possible in the PreservCyt Solution vial by rotating

the device in the solution 10 times while pushing against the vial wall. Swirl the brush vigorously to further release material. Discard the brush.

- Tighten the cap so that the torque line on the cap passes the torque line on the vial.
- Record patient's identification information on the vial. Place both vial and requisition into a specimen bag for transport to the laboratory.
- **Broom-Like Device Method**
 - Obtain an adequate sampling from the cervix using a broom-like device. Insert the central bristles of the broom into the endocervical canal deep enough to allow the shorter bristles to fully contact the ectocervix. Push gently, and rotate the broom in a clockwise direction 5 times.
 - Rinse the broom as quickly as possible into the PreservCyt Solution vial by pushing the broom into the bottom of the vial 10 times, forcing the bristles apart. As a final step, swirl the broom vigorously to further release material. Discard the collection device.
 - Tighten the cap so that the torque line on the cap passes the torque line on the vial.
 - Record patient's identification information on the vial. Place both vial and requisition into a specimen bag for transport to the laboratory.

Special Precautions:

- The use of lubricants is discouraged because lubricant can contaminate the specimen causing poor cell transfer to the slide and could therefore lead to unsatisfactory results.
- It is also recommended that a pap not be taken during menses.