

CLINICIAN'S GUIDE



Specimen Collection, Preparation and Handling



YOSEMITE PATHOLOGY®

Quality diagnostics for optimum patient care

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Tissue Specimens for Routine Pathology (Histology)

Once the specimen has been extracted from the patient, please place the specimen in 10% Neutral Buffered Formalin as soon as possible. The longer the specimen is not in formalin the more compromised the specimen may become. The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen source. Specimens in formalin do not need to be refrigerated.

A Special Note on Breast Specimens

Per CAP guidelines, breast specimens should be placed in Formalin for at least 6 hours before being processed. Due to this guideline, specimens placed in formalin after 2:00pm will incur an additional fixation period. Specimens that have been in formalin for less than 6 hours may have false positive results in regards to HER2, ER, and PR testing. Please list the time that the specimen was placed into formalin on the requisition. Failure to do so may result in a slower turnaround time for the patient.

Stone Chemical Analysis

Stones for Chemical analysis (Urethral, Bladder, Ureteral and Kidney) should be sent in dry/damp without any solutions. Place the stone in a container or plastic specimen bag. The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source.

Tissue Specimens for Flow Cytometry

Specimens that need Flow Cytometry performed need to be sent in a fresh sterile container without any fixative. The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. If there will be a delay in the arrival of the specimen to the lab, please place the specimen on a sterile piece

of gauze that has been dampened with sterile saline. Then place the specimen in the refrigerator.

Tissue Specimens for Crystal Analysis

Specimens for Crystal Analysis should either be placed in a sterile container without any additive or with alcohol that is higher than 80%. It is preferred to be received without any additive. The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. Do not place any specimens for Crystal Analysis in a water based solution (i.e. No Formalin or Saline). Please indicate on the requisition: "Crystal Analysis needs to be performed."

Fresh Muscle Biopsies

Please let laboratory personnel know when a fresh muscle biopsy is going to be scheduled so special arrangements can be made. Fresh muscle biopsies should be sent in a lightly damp sterile salinated piece of gauze. Then place the specimen into a sterile container. The specimen should not be clamped or submerged into any solution.

The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. The specimen should be refrigerated as soon as possible. Please let the laboratory couriers know that a STAT pick-up is needed.

Tissue Specimens for Immunofluorescence

Specimens for immunofluorescence should be handled with sterile instruments and should be placed in Michel's Transport Medium (Zeus Fixative) as soon as possible. The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. Please indicate on the requisition that

immunofluorescence should be performed and that the specimen is in Michel's Transport Medium (Zeus Fixative).

Bone Marrow

Once the bone marrow core has been extracted touch prep slides can be made from the core. Once those slides have been made, place the specimen into Formalin. The preference for the core is to be at least 1cm in length. Please make sure that all containers and tubes are labeled with at least two identifiers (please see section on Patient Identifiers).

Bone marrow aspirates for special studies should be sent in as follows:

- Flow Cytometry: At least 3mL in EDTA (purple top) tube. Sodium Heparin (green top) tube is okay if no EDTA is available.
- Cytogenetics: At least 3mL in Sodium Heparin (green top) tube only.
- FISH Testing: At least 3mL in Sodium Heparin (green top) tube only.
- Molecular Testing: At least 3mL in EDTA (purple top) tube only.

Bone marrow clots:

- Any specimen left over in the syringe, after collection for special studies, can be left in the syringe to coagulate. Once the clot has formed, you may place it in formalin.

Peripheral blood for special studies should be sent in as follows:

- Flow Cytometry: At least 5mL in EDTA (purple top) tube. Sodium Heparin (green top) tube is okay if no EDTA is available.
- Cytogenetics: At least 5mL in Sodium Heparin (green top) tube only.
- FISH Testing: At least 5mL in Sodium Heparin (green top) tube only.

- Molecular Testing: At least 6mL in EDTA (purple top) tube only. Specimens for more than one special study may be pooled in the same tube as long as they use the same type of tube.

For example: A bone marrow specimen that needs Flow Cytometry, Cytogenetics, FISH and Molecular testing would need: At least 6mL of bone marrow aspirate in an EDTA tube and at least 6ml in a Sodium Heparin tube. This makes a total of 1 full EDTA (purple top) tube and 1 full Sodium Heparin (green top) tube. Please make sure that you are using Potassium EDTA and Sodium Heparin. The use of Lithium Heparin will compromise the specimen.

Routine Non Gyn Cytology (Fluid Specimens)

Fluids should be placed into a sterile container (if needed) or left in the original collection device. The specimen container or collection device should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source.

Acceptable collection devices are:

- Vacuum Containers
- Syringe: Capped with needle removed
- Urine Collection Cup
- Fluid Collection Bag
- Bronchoscopy Specimen Collection Container

Non GYN for Flow Cytometry

Body fluids for Flow Cytometry must be collected in a sterile container. Once collected, the specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. Please state on the requisition that Flow Cytometry is needed.

Non GYN for Crystal Analysis

Specimens for Crystal Analysis should be placed in a sterile container without any additive. Do not place any specimens for Crystal Analysis in a water based solution (i.e. No Formalin or Saline). The specimen container should be labeled with at least two patient identifiers (please see section on Patient Identifiers) and with the specimen/specimen source. Please indicate on the requisition: "Specimen for Crystal Analysis."

Conventional Endocervical Brush/Spatula Protocol

Label the frosted end of the slide with the patient's name and date of birth in pencil. Do not use any ink based labeling device because the ink will dissolve during processing.

Three specimen sources can be sampled: endocervix, ectocervix, and vaginal pool. Endocervical and ectocervical specimens are recommended for premenopausal patients. Ectocervical specimens are recommended for pregnant patients. Ectocervical and vaginal pool specimens with and without an endocervical component are recommended for peri/postmenopausal patients, as this combination is most likely to pick up abnormally shed endometrials. Hormonal evaluations are performed on vaginal specimens.

Endocervical specimens are collected with a cytobrush using a 360° rotation within the canal.

Ectocervical specimens are collected with a spatula using a 360° rotation just inside the os, sampling both the transformation zone and ectocervix.

Vaginal pool specimens are collected by obtaining a drop of vaginal fluid from the posterior fornix using a glass pipette, tongue blade, cervical scraper, or the posterior lip of the speculum.

Endocervical and ectocervical specimens are smeared onto the glass slide immediately after collection and immediately fixed

with cytology spray fixative. Best results are obtained with a uniform thin smear. The cytology spray fixative should be held approximately 25cm away from the slide.

Allow the slide to dry before placing it back into the pap slide sleeve. Please label the sleeve with the patients name and birthdate.

ThinPrep® Endocervical Brush/Spatula Protocol

- Obtain an adequate sampling from the ectocervix using a plastic spatula.
- Rinse the spatula as quickly as possible into the PreservCyt Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.
- Obtain an adequate sampling from the endocervix using an endocervical brush device. Insert the brush into the cervix until only the bottommost fibers are exposed. Slowly rotate $\frac{1}{4}$ or $\frac{1}{2}$ turn in one direction. DO NOT OVER-ROTATE.
- Rinse the brush as quickly as possible in the PreservCyt Solution by rotating the device in the solution 10 times while pushing against the PreservCyt 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 the patient's name and Date of Birth on the vial.

ThinPrep® Broom-Like Device Protocol

- 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 five 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 the patient's name and Date of Birth on the vial.

ThinPrep® Vaginal Collection Protocol

- Obtain an adequate sampling from the top of the vaginal canal by using the convex end of a plastic spatula. Scrape the spatula across the top of the vaginal canal horizontally.
- Rinse the spatula as quickly as possible into the PreservCyt Solution vial by swirling the spatula vigorously in the vial 10 times. Discard the spatula.
- Obtain an adequate sampling from the corners of the vaginal canal by using an endocervical brush device. Use the brush to scrape the top right and left corners of the vagina.
- Rinse the brush as quickly as possible in the PreservCyt Solution by rotating the device in the solution 10 times while pushing against the PreservCyt 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 the patient's name and Date of Birth on the vial.

SurePath™ Vaginal Collection Protocol

- Obtain an adequate sampling from the top of the vaginal canal by using the convex end of a plastic spatula. Scrape the spatula across the top of the vaginal canal horizontally.
- Snap the device handle and drop the detachable head of the device into the SurePath™ vial. Place the cap on the vial.

- Obtain an adequate sampling from the corners of the vaginal canal by using an endocervical brush device. Use the brush to scrape the top right and left corners of the vagina.
- Take cap off of vial. Snap the device handle and drop the detachable head of the device into the SurePath vial.
- Place the cap on the vial and tighten.
- Record the patient's name and Date of Birth on the vial.

SurePath™ Endocervical Brush/Spatula Protocol

- Collect an adequate sample by inserting the contoured end of the plastic spatula and rotate 360° around the entire ectocervix.
- Snap the device handle and drop the detachable head of the device into the SurePath vial. Place the cap on the vial.
- Collect an adequate sample by inserting the brush into the endocervix until only the bottommost bristles are exposed at the os. Slowly rotate ¼ to ½ turn in one direction. To reduce unnecessary bleeding, do not over-rotate brush.
- Take cap off of vial. Snap the device handle and drop the detachable head of the device into the SurePath vial.
- Place the cap on the vial and tighten.
- Record the patient's name and Date of Birth on the vial.

SurePath™ Endocervical Broom-Like Device Protocol

- Collect an adequate sample by inserting the Rovers Cervix-Brush into the endocervical canal. Rotate brush five times in a clockwise direction.
- Drop the detachable head of the device into the SurePath vial.
- Place the cap on the vial and tighten.
- Record the patient's name and Date of Birth on the vial.

Requisitions

Requisitions must be filled out with the following information:

- 1) Patient's Name
- 2) Patient's Birthdate
- 3) Sex of the Patient
- 4) Collection Date
- 5) Requesting Physician
- 6) Specimen Source
- 7) LMP (For paps)
- 8) MRN if applicable
- 9) Any special testing instructions. (Crystal Analysis, R/O pneumo or fungus)

Please either attach a demographic sheet or a copy of the insurance card (back and front) and check the type of billing on the requisition.

Other helpful provided information such as patient history, any therapy the patient is undergoing or diagnosis codes are very much appreciated.

Patient Identifiers

All specimens coming into the laboratory must have at least two of the following identifiers:

- Name
- Birthdate
- Medical Reference Number

Additional information may be added to the container such as:

- Date of Service
- Doctor
- Any special notes such as fixative that may have been added (Zeus Fixative/ Michel's Transport Medium, RPMI, Carbol Wax, Cytolyt, etc.)



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