

GYNECOLOGIC CYTOLOGY

- **Conventional Pap Smear**
- **Liquid Based Pap Test**
 - **SurePath**
 - **ThinPrep with Imager**

Normally all paps will be submitted to cytology utilizing the “Cytology Gynecological Requisition” F-WI-CYT-007A REV 06/07 – other forms may be acceptable i.e. GA Form 3150 “Cervical Cancer Screening Report or our Web Order Requisition provided all required patient identification and demographic information is included.

CONVENTIONAL PAP SMEAR

Synonyms: Pap

Unit Code: 700, 701, 702

Methodology: Pap smears with primary screening by cytotechnologists and/or pathologist, when indicated.

Performed: Monday-Friday, excluding legal and national holidays.

Turnaround Time: Routine: 7 working days, STAT; as required

Collection and Transportation:

In general, the ideal time to perform a pap smear is greater than twelve days after the last menstrual period and twenty-four hours or more after douching. The proper technique for a pap using the scrape and cytobrush and/or swab is as follows:

Take the cervical scraping and place it mounded up on the glass slide away from the frosted end. Collect the cytobrush or swab specimen and in a sweeping rolling motion – taking up the mounded up scrape specimen – spread the combined specimens uniformly over the length of the slide, up to the frosted edge. The slide must then be immediately, sprayed with a pap fixative. The importance of immediate and generous fixation with pap fixative cannot be overstated. The smear should be left on a level surface (not at an angle) and allowed to dry.

If an accurate hormonal assessment is necessary (MI) then a lateral vaginal wall scraping should be submitted separately.

- Avoid KY Jelly lubricant.
- Collect cell sample from cervix and endocervical canal respectively with spatula and endocervical brush.
- Apply the sample onto the labeled glass slide as stated above and spray immediately with cytology fixative to avoid air-drying artifacts. To avoid problems **use only cytology fixatives.**
- Send the smear to the laboratory in a protective slide holder along with the matched requisition properly inserted in biohazard bag.

Instructions for Submitting Specimens to Cytology

- The laboratory will proceed with the staining, screening, and review by a cytotechnologist and/or pathologist according to established guidelines.
- Please do not place the mucus plug on the pap slide as this interferes with staining and obscures important cellular detail.

Special Instruction:

The requisition should be properly filled out with the following information included:

- Patient's complete name on requisition, slide, and pap folder.
- Patient's age, date of birth, and date of last menstrual period.
- ICD-9 codes and pertinent clinical information such as: cervical lesion, or suspicious for Herpes, known diagnosis such as: previous abnormal pap smear or biopsy, and relevant treatment such as: cryosurgery, chemotherapy or radiation.
- Special circumstances include: pregnancy, post partum, menopause, hormone replacement, or birth control.

Causes for rejection of specimen or limited reports:

- Incomplete and/or improper labeling
- Insufficient pertinent clinical history
- Specimen not fixed on slide immediately
- Obscuring inflammation, debris, or excessive air drying
- A broken slide will be rejected and discarded as a biohazard.
- Always record if a cytobrush was used to obtain the Pap smear. Failing to record the use of a cytobrush may result in erroneous atypical results for the patient.

Remember: The more information you give the laboratory, the better we can serve you and your patients.

Reference Range:

CPT Code: 88164 with possible 88141

Significance and Interpretation: Detection of pre-cancerous and cancerous cells on the cervix, endocervix; and sometimes endometrial abnormalities. Rarely extrauterine malignancies can be detected. Certain types of infectious organisms can be identified.

Reference:

LIQUID BASED PAP SMEAR

Synonyms: AutoCyte Pap, Sure Path Pap, Cytyc Pap, Thin Prep Pap, or Liquid based Pap

Unit Code: 713(AutoCyte) 714(Cytyc with or with out Imager) 720(GA HD Thin Prep)

Methodology: Monolayer slide preparation; slides are screened by cytotechnologists and/or pathologist, when indicated.

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: Routine: 7 working days, STAT, as required

Instructions for Submitting Specimens to Cytology

Collection and Transportation: Tests and sampling protocols are proprietary and performed according to the testing desired. (See the Attached Protocols for Sure Path and Thin Prep sampling.)

Special Instruction:

The requisition should be properly filled out with the following information included:

- Patient's complete name on requisition and specimen container.
- Patient's age, date of birth, and date of last menstrual period.
- ICD-9 codes with pertinent clinical information such as: cervical lesion, or suspicious for Herpes, known diagnosis such as: previous abnormal pap smear or biopsy, and relevant treatment such as: cryosurgery, chemotherapy or radiation.
- Special circumstances include: pregnancy, post partum, menopause, hormone replacement, or birth control.

Remember: The more information you give to the laboratory, the better we can serve you and your patients.

Causes for rejection of specimen or Limited Reports:

- Incomplete and/or improper labeling
- Insufficient pertinent clinical history
- Obscuring inflammation or debris.
- Avoid lubricants. K-Y Lubricating Jelly, Surgilube, Replens, Astroglide, Crystelle, and Walgreen's Lubricating Jelly had no ill effects on the cellularity of the specimen when used sparingly compared with the matched control slides without lubricant that were prepared from the same vials. Specimens containing FemGlide, Triad, Maxilube, Aquagel, or Aquasonic, on the other hand, all resulted in slides that were unsatisfactory for evaluation due to scant squamous component. The matched control slides for these specimens all were adequately cellular.
- Insufficient sampling

Reference Range:

CPT Code: 88142 or 88175 with possible 88141

Significance and Interpretation: Detection of pre-cancerous and cancerous cells on the cervix, endocervix; and sometimes endometrial abnormalities. Rarely extrauterine malignancies can be detected. Certain types of infectious organisms can be identified.

Reference: Tripath and Cytoc package inserts

MATURATION INDEX SMEAR

Synonyms: MI SMEAR

Unit Code: 88155

Methodology: Smears from the lateral vaginal wall with primary screening by cytotechnologist and/or pathologist, when indicated.

Instructions for Submitting Specimens to Cytology

Performed: Monday-Friday, excluding legal and national holidays.

Turnaround Time: Routine: 7 working days, STAT; as required

Collection and Transportation:

Special care must be taken in order to obtain a specimen useful to hormonal interpretation. The best technique is as follows:

1. Insert a non-lubricated speculum into the vagina – prior to digital examination or other local procedures.
2. Scrape the lateral vaginal wall with a wooded or plastic spatula at the union of the lower with the middle third of the vagina.
3. Smear the material on a clean glass slide in a quick rotary motion, spreading the specimen uniformly over the length of the slide, up to the frosted edge. The slide must then be immediately, sprayed with a pap fixative. The importance of immediate and generous fixation with pap fixative cannot be overstated. The smear should be left on a level surface (not at an angle) and allowed to dry. Conventional or liquid based pap smears must be collected and submitted separately. Key points to remember:
 - Avoid KY Jelly lubricant.
 - Apply the sample onto the labeled glass slide, as stated above, and spray immediately with cytology fixative to avoid air-drying artifacts.
 - To avoid problems **use only cytology fixatives.**
 - Send the smear to the laboratory in a protective slide holder along with the matched requisition (blue and white) properly inserted in biohazard bag.
 - Pap smears must be taken and submitted separately on the “Gynecological Cytology Requisition”.
 - **The laboratory will proceed with the staining, screening, and review by a cytotechnologist and/or pathologist according to established guidelines..**

Special Instruction:

The requisition should be properly filled out with the following information included:

- Patient’s complete name on requisition, slide, and pap folder.
- Patient’s age, date of birth, and date of last menstrual period.
- ICD-9 codes and pertinent clinical history.
- Special circumstances include: pregnancy, post partum, menopause, hormone replacement, or birth control.
- Clinicians are reminded that current bio-chemical methods allow for much better interpretive assessments of patients hormonal status than offered by the MI.

Instructions for Submitting Specimens to Cytology

Causes for rejection of specimen:

- Incomplete and/or improper labeling
- Insufficient pertinent clinical history
- Specimen not fixed on slide immediately
- Obscuring inflammation, debris, or excessive air drying
- A broken slide will be rejected and discarded as a biohazard.
- **Contamination of the lateral vaginal wall specimen with metaplastic and/or endocervical cells.**
- **Inflammatory effects including infectious organisms.**

Remember: The more information you give the laboratory, the better we can serve you and your patients.

Reference Range:

CPT Code: 88155

Significance and Interpretation: Hormonal cytology evaluates the cellular composition of the surface layers of the squamous vaginal epithelium. It therefore reflects the balance struck by the effects of estrogen and progesterone upon the target tissue.

The effects of estrogen are estimated by observing the maturation of the vaginal epithelium and a differential cell count is made. Only morphologically normal squamous cells are counted. This differential count will take three squamous cell types into consideration: Superficial – Intermediate – Parabasal. Results will be reported in percentages, i.e.:

<u>Superficial</u>	<u>Intermediate</u>	<u>Parabasal</u>
10	90	0

Further interpretive findings will be added, as the cytohormonal findings are interpreted by the pathologist.

NON GYNECOLOGIC CYTOLOGY

Clinical information is very important for cytological interpretation. This includes clinical diagnosis or impression, history of cancer or other condition, X-ray and CT results.

Brushing specimens

- Bile duct
- Bronchial
- Colonic
- Esophageal
- Gastric

Unit Code: 801

Methodology: Filter Preparation/Smears for Papanicolaou Stain

Instructions for Submitting Specimens to Cytology

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 2 working days, STAT: as required

Specimen Collection and Transportation:

- After collecting specimen from endoscopy, cut the brush and submit the entire brush tip in cytology fixative (CytoLyt Solution, PreservCyt Solution, Cytorich Red or 50:50 Reagent Alcohol and Distilled Water)
- If slides are prepared at physicians' offices or hospitals, they need to be sprayed with a cytology fixative immediately except for cases suspicious for lymphoma or leukemia. In those cases one or two air-dried smears (clearly marked) may be sent for Wright staining. Please be aware that air-drying artifacts can cause difficulty in interpretation.
- Specimen should be refrigerated.

Causes for rejection of specimen or Limited Reports:

- Incomplete and/or improper labeling
- Insufficient pertinent clinical history
- Obscuring inflammation, debris, or excessive air drying
- Inadequate sampling

Reference Range:

CPT Code: 88112 and possible 88305

Significance and Interpretation: Detection of malignant cells or some benign conditions and infections that can aid in clinical management.

Reference:

CEREBROSPINAL FLUID

NOTE: ALL CSF'S ARE SEND OUT SPECIMENS TO ARUP AND LONGER TURN AROUND TIMES IS TO BE EXPECTED.

Synonym: CSF

Unit Code: 801

Methodology: Cytocentrifuge or if unavailable Filter Preparation and staining using Papanicolaou stain.

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 5 working days

Specimen Collection and Transportation:

- One tube of CSF should be sent to cytology lab, a separate tube should be sent for other chemistry tests or culture when ever possible,
- The tube and requisition should be clearly marked when one single tube is ordered for different tests.
- Specimen should be refrigerated

Instructions for Submitting Specimens to Cytology

- Specimen and requisition should be properly placed in a biohazard bag.

Causes for rejection of specimen or Limited Reports:

- Incomplete and/or improper labeling
- Insufficient pertinent clinical history
- Obscuring inflammation, debris, or excessive air drying
- Inadequate sampling
- Leaking containers

Reference Range:

CPT Code: 88112 or 88106

Significance and Interpretation: Detection of malignant cells or some benign conditions and infections that can aid in clinical management

Reference:

FINE NEEDLE ASPIRATION CYTOLOGY (FNA)

Synonyms: FNA

Unit Code: 801

Methodology: Routine cytological study.

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 2 working days, STAT: as required

Collection and transportation:

- FNA specimen is collected using a 22 g or smaller needle and syringe, then back-washed into the cytological fixative (CytoLyt Solution, PreservCyt Solution, Cytotech Red or Saccomanno fluid)
- Cystic fluid should be refrigerated or mixed with cytological fixative
- Smears should be sprayed with cytospray immediately
- Air dried smears are required only in cases suspicious of lymphoma
- Patient may be sent to Doctors Lab (Valdosta) for pathologist to perform the FNA on a palpable lesion.
- Appointments can be arranged for one of the pathologists to be present at the hospital for adequacy examination during radiological or ultrasound guided FNA.
- Specimen and requisition should be properly placed in a biohazard bag.

CPT codes: 88173 – interpretation of FNA (special studies may be added)

88172 – adequacy examination

88170 – performing FNA

Significance:

Instructions for Submitting Specimens to Cytology

- Fine Needle Aspiration Cytology (FNA) is a non-invasive procedure to obtain cell sample from a suspicious lesion for cytological examination to determine the true nature of the mass.
- In general, FNA is used for palpable masses, such as breast masses, thyroid nodules, parotid masses and enlarged lymph nodes, etc.
- This is an office procedure, and can be done on the first patient's visit with the problem, it would shorten the observation period; FNA does not require special preparation, and the procedure is almost painless. Good sampling technique can yield important information in decision making on patient care.
- Ultrasound and radiologically guided FNA can be performed on deep-seated masses, such as CT scan for lung, liver and pancreatic masses or thoracic and abdominal lymph nodes.

Advantages

- FNA is a fast and non-invasive procedure that carries high sensitivity and specificity.
- It is cost effective, and eliminates the wait and see period, sometimes, it may avoid more invasive surgical procedures and the physician may proceed to the specific therapy.
- FNA's on non-palpable superficial lesions, such as those with an abnormal thyroid ultrasound or abnormal mammogram; can be performed with ultrasound or mammogram guidance.

Procedure

Aspiration of palpable lesions

Instrumentation:

- 22-25 gauge 1 – 3 inch disposable needle
- 20 ml disposable syringes
- Single grip syringe holder
- Alcohol or betadine pads
- Cytological fixative (CytoLyt Solution, PreservCyt Solution, Cytorich red or Saccomanno fluid) and labeled glass slides

Aspiration technique

- Place syringe into syringe holder
- Palpate the lesion and estimate the depth of the lesion, mentally select point of entry and direction of needle.
- Disinfect skin with alcohol or betadine
- Fix the target between one thumb and index finger.
- Introduce the needle into the skin. Choosing the shortest distance to the target, when needle passes through the lesion, changes of consistency should be felt.
- When the needle tip is in the lesion, apply suction through the needle holder, and then move the needle in and out within the lesion in order to loosen the cells.

Instructions for Submitting Specimens to Cytology

- Without releasing the negative pressure, re-direct the needle by moving the needle to the surface of the lesion but still under the skin, then change direction of the needle into the mass (do not change direction of the needle while it is in the mass, this may cause hemorrhage) and repeat # 6.
- Most importantly, release the negative pressure to let the plunger return to the resting position before withdrawing the needle.
- Apply pressure to the aspiration site to prevent hemorrhage.
- If unstained smears are desired (not required, except for cases with suspicion of lymphoma). To prepare smears, remove the needle from the syringe before sucking 1-2 ml of air into the syringe, then reattach the needle and push the plunger gently to release one drop of aspirated material onto the slide, prepare the smear as for a blood smear, spray with cytology fixative immediately, or let air dry for hematological examination.
- Back-wash the needle to release all cell sample into the cytological (CytoLyt Solution, PreservCyt Solution, Cytorich Red or Saccomanno fluid) fixative (with needle attached, draw some fixative into the syringe by suction action and push back to the vial through the needle, repeat a few times).
- 2 –3 aspirations from different areas of the lesion may be needed for better evaluation.
- Different lesions should be submitted in separate containers with location of lesion identified.
- Remember that clinical history is an important part of cytological study.

References:

Hand Book of Fine Needle Aspiration Biopsy Cytology,
2nd. Ed. By Tilde S. Kline, M.D,

Aspiration Biopsy Cytologic Interpretation and Histologic Bases

By Leopold G. Koss, M.D., Stanislaw Woyke, M.D. and Wlodzimierz Olszewski, M.D.

SPUTUM

Sputum should ideally be an early morning or “first cough” specimen. Many specimens will be unsatisfactory if they contain saliva from the mouth rather than the thicker mucinous fluid produced in the lower respiratory tract. If possible, a specimen, which resembles pure saliva, should be immediately recollected rather than sent to the laboratory. A pooled (24 hour) sputum is highly undesirable (due to degenerative artifacts and sampling errors); rather, three to five early morning sputum’s collected on consecutive days will improve the yield and cytologic accuracy.

Synonyms:

Unit Code: 801

Methodology: Routine cytological study

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 1 working day, STAT: as required

Collection and Transportation:

- Only a deep cough specimen is a representative sample from the lungs.
- Saliva or oral specimen is not suitable and the specimen should be recollected to avoid unnecessary charges.

Instructions for Submitting Specimens to Cytology

- Sputum should be expectorated in a container with CytoLyt Solution, PreservCyt Solution, or if this is unavailable Cytorich Red or Saccomanno's Fixative, refrigerated, and sent to the laboratory as soon as possible.
- Three to five different sputum samples collected over a three to five day period will improve the yield of cytology detection. The patient should be given three or more containers containing fixative. They should be labeled #1, #2, and #3, etc. with the date of collection. After brushing teeth and rinsing mouth thoroughly with water, the patient, on each of the consecutive days, should collect the first morning deep cough specimen into the appropriate container.
- Specimen and requisition should be properly placed in a biohazard bag.

Causes for Limited Reports: Delayed delivery of specimens, incomplete and/or improper labeling, insufficient pertinent clinical history or inadequate deep respiratory specimen

Reference Range:

CPT Code: 88112 possible 88305

Significance and Interpretation: Detection of malignant cells or some benign conditions and infections that can aid in clinical management.

Reference:

SMEAR SPECIMENS

The slides must be labeled in pencil on the frosted end with the patient's first and last name. The discharge should be smeared lengthwise along the slide and the slide immediately sprayed with pap fixative and left to dry in a level position. Ideally two to four slides should be prepared with the fourth slide air-dried (if lymphoma needs to be ruled out) and the first through third slide fixed immediately with pap fixative. If a very limited amount of material is present, sufficient for only one slide, then this slide should be immediately fixed. The requisition must state which breast the discharge is from, the presence or absence of a palpable mass, presence of a bloody discharge, history of injury proximal to the site, personal or family history of breast cancer, and mammography or other clinical finding.

- Breast discharge smear
- Buccal smear for sex chromatin
- Nipple smear
- Tzank smear (Herpes)
- Anal Paps

Unit Code: 801

Methodology: Routine cytological study.

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 2 working days, STAT: as required

Collections And Transportation: Send prepared slide (see Special Instruction) to the laboratory in a protective holder along with matched requisition.

Special Instruction:

Instructions for Submitting Specimens to Cytology

Breast and Nipple Discharge

- Smear discharge onto glass slide(s) and spray with fixative immediately.
- Label slide(s) with patient's name and indicate right or left breast.
- Do not place both right and left samples on the same slide. This practice can cause problems determining site in case of abnormal findings.

Buccal Smear

- Scrape cell sample from inside mucus of cheek with a tongue depressor.
- Smear sample onto a clean glass slide and spray with cytology fixative immediately, dry and send to the laboratory.

Tzank Test

- Scrape sample from the base of the lesion (sore).
- If vesicle is present, burst the vesicle smear fluid from vesicle and scrape cells from the base of vesicle then smear onto a labeled clean glass slide, spray with cytology fixative immediately, dry and send to the laboratory.

Causes for Limited Reports: Incomplete and/or improper labeling, insufficient pertinent clinical history, specimen not fixed on slide immediately

Reference Range:

CPT Code: 88161

Significance and Interpretation:

- Detection of malignant cells or some benign conditions and infections that can aid in clinical management.
- Detection of sex chromatin in buccal smear would assist in determining patient gender

Reference:

FLUID SPECIMENS

Body fluids, Bronchial Washing, and Gastric Lavages are all include under this heading. Pertinent history to include the exact site from which the fluid was obtained and reason(s) for collection with suspect diagnosis is essential for accurate cytologic interpretation. The fluid should be place in an appropriate sized container, labeled with the patient's identification. Bloody body fluid (pericardial, pleural, peritoneal, ascetic, and contents of cysts or joints) should have 1 ml of heparin (1,000 U/ml) added per liter of fluid. The heparin should be added immediately and the specimen thoroughly mixed to avoid coagulation. All specimens should be promptly refrigerated to retard cellular degeneration and transported as soon as possible to the laboratory.

- Abdominal
- Ascites
- Bronchial alveolar lavage
- Bronchial washing
- Cerebrospinal fluid

Instructions for Submitting Specimens to Cytology

- Cul-de-sac
- Gastric Lavages
- Joint fluid
- Ovarian cyst
- Pericardial
- Peritoneal
- Pelvic
- Pleural

Unit Code: 801

Methodology: Slide Preparation with Papanicolaou Stain with possible cell block

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 2 working days, STAT: as required

Collection and Transportation: Preferred; fresh specimens sent to the laboratory immediately; Acceptable; specimens refrigerated 1-2 days. List the time of collection on the request form and CALL the laboratory if more than 2 days old.

Special Instruction:

- Send as much fluid as possible to cytology lab.
- Large volume specimens requiring multiple tests should be sent to the different departments (i.e. Microbiology, Hematology, and Chemistry) in separate tubes.
- Small specimens that require multiple tests may be sent in one tube. The tube should be sterile if a culture is ordered. Clearly mark all the tests. Doctors Laboratory, Inc. will handle the specimen accordingly.
- Specimen and requisition should be properly placed in a biohazard bag.

Causes for Limited Reports: Delayed delivery of fresh specimens, improper and/or incomplete labeling, or insufficient pertinent clinical history.

Reference Range:

CPT Code: 88112 with possible 88305

Significance and Interpretation: Detection of malignant cells or some benign conditions and infections that can aid in clinical management.

Reference:

UROLOGIC SPECIMENS

The specimen is collected in a labeled container – without fixative. First morning or 24 hour urine must never be collected as the cells lie in the acidic urine for extended periods and undergo extensive degenerative changes. The ideal specimen is a clean catch from the second urination of the morning, preferably following ingestion of several glasses of water. The specimen should be at least 50-100 ml, but a smaller amount can be examined, if necessary. The specimen must be refrigerated immediately after voiding and the collection should be timed so that transportation to the laboratory will be within 24 hours. Urine collected by catheterization or suprapubic bladder puncture is acceptable, however, to avoid false positive

Instructions for Submitting Specimens to Cytology

results be sure to indicate type of collection on the requisition. Other history such as the presence of hematuria, proteinuria, or malignancy is of vital importance.

- Urine
- Bladder washing
- Catheterized urine
- Kidney urine

Synonyms:

Unit Code: 801

Methodology: Concentrated filter Preparation and possible cell block

Performed: Monday-Friday, excluding legal and national holidays

Turnaround Time: 2 working days, STAT: as required

Collections and Transportation:

- The recommended sample for best detection is the “second morning urine”. However, any urine sample (except for 24 hour sample) can be used.
- Please indicate whether the sample is “voided urine”, “catheterized urine”, or “bladder washing”. Different criteria are used for interpretation depending on the type of sample.
- A 50:50 solution of reagent alcohol and water can be added to the urine sample in approximately the same amount as the volume of urine. If fixative is not used, the sample should be refrigerated at all times to avoid cell deterioration. It should be sent to the laboratory within 24 hours after collection
- Specimen and requisition should be properly placed in a biohazard bag.

Causes for Limited Reports: Delayed delivery of fresh specimens, incomplete and/or improper labeling, insufficient pertinent clinical history

Reference Range:

CPT Code: 88112 and possible 88305

Significance and Interpretation: Detection of malignant cells or some benign conditions and infections that can aid in clinical management.

Reference:

SUREPATH™ test pack

FOUR SIMPLE STEPS

<p>1. Cervical Sample Collection Insert the Rovers Cervex-Brush® into the endocervical canal. Apply gentle pressure until the bristles form against the cervix. Maintaining gentle pressure, hold the stem between the thumb and forefinger.</p> <p>NOTE: ROTATE BRUSH FIVE TIMES Rotate the brush five times in a clockwise direction.</p>	<p>2. Preserve the entire sample Placing your thumb against the back of the brush pad, simply disconnect the entire brush from the stem into the SurePath™ preservative vial.</p>	<p>3. Cap and label vial Place the cap on the vial and tighten. Label the vial and lab requisition form with patient name and/or number, physician name and date if desired.</p>	<p>4. Send vial to your lab Place the vial and requisition into a specimen bag and send to the laboratory.</p>

ONE CLEAR RESULT

In clinical trial studies, cervical samples were taken and first smeared onto slides. Residual cells from the conventional smear were used in the PrepStain™ process. In each case, the same patient sample, with very different results.

<p>1. </p>	<p>Conventional Conventional smear, dense with blood, mucus, and inflammation is diagnosed as an unsatisfactory specimen, and the patient is called back in for another sample.</p>	<p>2. </p>	<p>Conventional The conventional smear, although diagnosed as "within normal limits" can be considered "limited" with the cells hidden by excessive cell clumping.</p>
<p></p>	<p>SurePath™ slide The same sample was processed by PrepStain™, which eliminated the obscuring material for a sample easily diagnosed as "within normal limits."</p>	<p></p>	<p>SurePath™ slide The same sample, using residual material from the smear and processed by the PrepStain™ allows for diagnosis with no questions or concern.</p>



CERVEX-BRUSH™
is a registered trademark
of Rovers BV, OSS, Netherlands

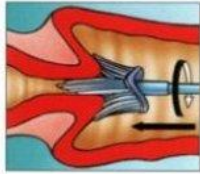
TRiPATH™
care technologies™

TriPath Imaging, Inc.
780 Plantation Drive
Burlington, NC 27215 USA

PA-035 01/02
6200820701

ThinPrep® Pap Test™ Quick Reference Guide

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 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...

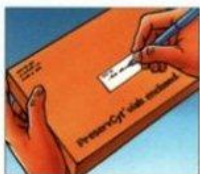
...the cap so that the torque line on the cap passes the torque line on the vial.



Record...

...the patient's name and ID number on the vial.

...the patient information and medical history on the cytology requisition form.

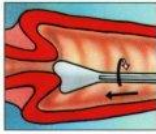


Place...

...the vial and requisition in a specimen bag for transport to the laboratory.

The ThinPrep® Pap Test™
Clear and simple.

ThinPrep® Pap Test™ Quick Reference Guide Endocervical Brush/Spatula Protocol



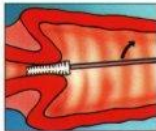
Obtain...

...an adequate sampling from the ectocervix using a *plastic* spatula.



Rinse...

...the spatula 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 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 ID number on the vial.
...the patient information and medical history on the cytology requisition form.



Place...

...the vial and requisition in a specimen bag for transport to the laboratory.

The ThinPrep® Pap Test™
Clear and simple.