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FOCUS

PAPANICOLAOU SOCIETY OF CYTOPATHOLOGY

Companion Society of the United States and Canadian Academy of Pathology

Dedicated to Clinical Practice, Clinical Education and Clinical Research

TIMELY TOPICS

AN UPDATE ON CYTOLOGY PROFICIENCY TESTING

Diane D. Davey, M.D., (University of Kentucky, Lexington, KY), George Birdsong M.D., (Grady Health System, Atlanta, GA), and Dina Mody, M.D., (Methodist Hospital, Houston, TX)

The Midwest Institute for Medical Education (MIME) conducted most of the 2005 proficiency testing, with the exception of Maryland, which has had an approved program for many years. In the initial 2005 testing sets, 7% of 6528 cytotechnologists, 10% of 5811 secondary pathologist screeners, and 33% of 466 primary pathologist screeners failed. Four percent (4%) of cytotechnologists, 8% of secondary pathologists, and 34% of secondary pathologists failed the 10 slide 1st retest. The 2nd retest (3rd test) is 20 slides and showed 11-20% failure rates among professional subgroups with sufficient numbers for meaningful evaluation, with the most failures in primary pathologists. Very few individuals took a 3rd retest; some stopped interpreting cervical cytology specimens.

MIME was bought by the American Society for Clinical Pathology (ASCP) last February. Both the ASCP and the College of American Pathologists (CAP) have approved programs.

The Cytopathology Education and Technology Consortium (which includes the Papanicolaou Society of Cytopathology) wrote a detailed letter to the government with criticisms and proposed changes. This document was sent in March, 2005.

The main criticisms were:

1) Testing of individuals instead of laboratories

2) Excessive frequency of testing; no evidence that annual testing is necessary

3) Lack of field validation of slides by participants and requirement for continuous validation of slides (this is now done by other organizations administering PT, including CAP and ASCP)

4) Grading scheme does not reflect current practices and patient follow-up: objections to automatic failure for calling HSIL+negative, differential grading for LSIL and HSIL

5) PT does not account for new computerized screening technologies

6) Inability of PT to replicate normal working conditions including entire Pap screening process

7) Lack of evidence that PT correlates with competency of practitioners and leads to improved patient care

Some proposed changes could be incorporated into new regulations, while others would require

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legislative changes. The CAP continues to pursue legislative changes. The Clinical Laboratory Improvement Advisory Committee (CLIAC) named a workgroup chaired by Dr. Diane Solomon to consider regulatory changes, and these were presented to the entire committee in June 2006. Three PSC committee members were part of the workgroup: Drs. George Birdsong, Diane Davey, and Dina Mody. CLIAC accepted many of the changes suggested by the workgroup and recommended a modified grading scheme. Suggested changes were to: decrease frequency of testing to every 3 years, require field validation of slides, change grading scheme (make it identical for cytotechnologists and pathologists, eliminate automated failure penalty for missing HSIL+, and eliminate penalties for confusing LSIL and HSIL). The number of slide challenges will likely be increased to 20, and new technologies may be incorporated to allow images and digitized slides. While frequency of testing of individuals will likely decrease, laboratory educational programs during interim years will be strongly encouraged. These suggested changes will need to be incorporated into proposed regulations. The proposed regulations will be published in the Federal Register as a "Notice of Proposed Rule Making" (NPRM) which will be followed by a comment period, revisions, and possibly a second comment period. The time course for change is uncertain at this time, but the NPRM is unlikely to appear before the first quarter of 2007 and could be later. Any regulatory changes are thus unlikely to be implemented for at least a few years, and those suggested by CLIAC could change during rulemaking and comment periods.

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The members of the Papanicolaou Society of Cytopathology thank you for your generous support.

FOCUS

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President's Message

Andrea Abati, M.D.

National Cancer Institute, Bethesda, Maryland

It was the best of times, it was the worst of times, ... it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us...

Charles Dickens

If you read my President's Message in the May issue of Focus, you have probably figured out that I like Charles Dickens. I read a lot of his work when I was in school and this quote was always my favorite. The first time I read it, I thought it applied to college. The next time I read it, I thought it applied to medical school. The next time I read it, I thought it applied to residency..... then fellowship.... then working at NIH....(then marriage).... and so on. Maybe it just seems to relate perfectly to my perception of challenging times. Thus, of course it applies to my Presidency of this relatively small but growing organization. It seems like yesterday, but it was actually almost 12 years ago, when Carlos Bedrossian, invited me to come to a business meeting of the PSC. Little did I know he planned on nominating me for the Executive Board and that there would be an open vote at the meeting that day! There I was, sitting in this conference room feeling incredibly anonymous and insignificant, surrounded by many famous cytopathologists (Steve Silverberg, Lester Layfield, Michael Cohen, Jan Silverman, Kim Geisinger, etc.), none of whom I knew at the time. Boy, was I embarrassed! Imagine my surprise when I won! Little did I know what was in store. We were a fledgling society at the time - a real Mom (Ursula) and Pop (Carlos) shop and those of us that got involved were expected to work BIG TIME. No task was too great (editing newsletters) or too small (licking envelopes), and boy was it fun. Coming from NIH where I was used to menial tasks such as vacuuming, taking out the trash, and dusting my office (heck - I even painted my office), it seemed a natural progression. Carlos was a wonderful mentor to so many of us who were starting out who did not have the coattails of a famous mentor to hang on to. I will always be grateful to him for that.

When I think back on the early days of my career, many of my absolutely happiest memories have to do with PSC and our annual meetings at USCAP. The scientific sessions and of course the receptions where you actually got to see the people you were speaking with on the phone all year (there was no email back in the days of the dinousaurs...) and events I looked forward to all year ("... what am I going to wear..." ??). Many of the plans for the NCI Breast Conference that I helped organize in 1996 were made at the PSC reception that year in the Washington Hilton. This year the seedlings for the NCI Thyroid FNA State of the Science Conference (October 22 and 23, 2007) were planted at the PSC annual meeting. Add a little wine to a cytological mind and you don't know what will happen next...

The "season of darkness" - well, we all know what that was - last year when we almost lost our spot at USCAP due to low attendance and bad reviews at our evening sessions. It was heart wrenching, to say the least. We were working really hard trying to put together great sessions but we were not getting good reviews. Luckily, this downward spiral reversed itself at the annual meeting last year and we had a great meeting, bringing us to the "spring of hope" - March 2007. Lester and his magicians have once again put together a fabulously cutting edge scientific session which we hope you will ATTEND and RATE HIGHLY because we are not completely out of the woods yet. This issue of FOCUS has detailed information about it on page 4. In addition to our evening session we have an interesting afternoon session as well - Dr. John Abele from Outpatient Pathology Associates of Sacramento, California, is going to speak to us about how his group of cytopathologists performs ultrasound localization for FNAs. I was fortunate to spend a few days with Dr. Abele in his clinic and saw first hand how useful and informative cytologist performed ultrasound can be when doing FNAs. You can actually see when you are in the lesion as well as the characteristics of the lesion (solid, cystic, etc) , which is particularly useful for thyroid aspirates of palpable and non-palpable lesions. So, while ultrasound technology has been around for a while, its use by cytologists themselves can be considered pretty much "cutting edge". What I really like about it is that it is something I can see, unlike most of what is cutting edge in pathology on the molecular level. There is something incredibly cool about seeing a nodule on ultrasound and actually watching your needle sample it on the screen in front of you. It is great! I highly recommend coming to hear John who is an absolute master.

In other society news we may have a semi-permanent spot for a session at the European Congress of Cytology. Through Philippe Viehl we were invited to the meeting in Venice this year. Martha Pitman and Carlos Bedrossian brought down the house, which is highly encouraging for our future participation.... The PSC textbook series by Oxford University Press is moving along and coming to fruition. The series will be based on small tissue pathology, ie not just cytology but biopsy pathology also. It is a unique concept which we think (and hope) should be very successful.... Our website, which got a fabulous face lift a few years ago by Rana Hoda and our webmaster, continues to get many hits looking at our standards of practice guidelines and case of the month (which is due for some back updating). The thyroid guidelines are there in Power Point format now and will be in outline form by January. Zubair Baloch is putting together a committee to review urinary cytology guidelines which will be published on our website as soon as they are completed. Rana and I are working with our webmaster to add a " Cytologic Images" section to the PSC website that is organized by diagnosis. For this section our members can send in as well as view images and pull images off for teaching or lecturing. The success of this will depend upon our members sharing their photos, but if they do we will all definitely benefit greatly. The website for the NCI Thyroid FNA State of the Science Conference will go live on May 1, 2007 with the initial review and discussion points. It will be fully interactive (much like the last Bethesda System website was) and will remain permanent for educational purposes. An online atlas will be done as well after the conference. These should be fabulous educational tools. I will send out information via the PSC and ASC list serves.

Well, in these 11 years my involvement has come full circle to the point where in March I will be passing the Presidency baton to Stephen Raab. I would like to formally thank Ursula Bedrossian, Carlos Bedrossian, Kim Geisinger, Claire Michael, Steve Raab, Lester Layfield, Martha Pitman, Eric Suba, Zubair Baloch, David Chhieng, Dan Kurtycz, Ann Moriarty and Aylin Simsir for their never ending support and help to me and dedication to excellence and this society. I truly hope that many more of you will continue to become involved in this society - we are small, but we are dedicated to education and "we have everything before us".

My very best wishes to you all,
Andrea

Program for the Papanicolaou Society of Cytopathology

USCAP Events

MARK YOUR CALENDARS FOR SAN DIEGO EVENTS!!!
SATURDAY MARCH 24, 2007

2 - 4 pm ***The Annual Afternoon Scientific Session of the International Relations and Scientific Program Committees***

INTERNATIONAL PERSPECTIVES ON EMERGING TECHNOLOGIES

Moderators: Eric J Suba, M.D. and Carlos W. Bedrossian, M.D.

p16 PROTEIN: A CYTOLOGICAL MARKER FOR PREDICTING HIGH-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA
Christine Bergeron M.D. PhD, Head, Department of Pathology, Laboratoire Pasteur-Cerba, Cergy Pontoise, France

PATHOLOGIST ULTRASOUND DIRECTED FNA AND CORE BIOPSIES: THE SACRAMENTO EXPERIENCE
John S. Abele M.D., Director, FNA Clinic, Outpatient Pathology Associates, Sacramento CA; Associate Clinical Professor, Department of Pathology, University of California, San Francisco

4 pm ***Business Meeting of the PSC***

5 pm ***PSC Reception***

7 - 10 pm ***Evening Companion Meeting***

CHANGING PRACTICE PATTERNS USING SMALL TISSUE PATHOLOGY

Moderator: Lester Layfield, M.D.

Papicolaou Society of Cytopathology

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George N. Papanicolaou
1883-1962

Call for Nominations

Deadline: November 15, 2006

The Nominating Committee is seeking nominations for a President Elect, Treasurer and three Members-at-Large.

President-Elect:

-
-
-

Treasurer:

-
-
-

Members-at-Large:

-
-
-
-
-
-

Nominations can be received via fax, e-mail or regular mail. (See below.)
The election will be conducted by ballots, and the results will be announced on March 24, 2007, during the PSC Annual Business Meeting.

Fax to: Claire W. Michael, M.D.
734-763-4095

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Papanicolaou Society of Cytopathology
2007 Membership Application

Name & Title: _____

Mailing Address:_____

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Phone:_____Fax:_____

Email Address:_____

Type of Membership (check one):

- ☐ $135 Practicing M.D. or Ph.D. in United States or Mexico
- ☐ $143 Practicing M.D. or Ph.D. in Canada
- ☐ $195 Practicing M.D. or Ph.D. in other countries
- ☐ $ 25 Resident, Fellow, Graduate Student, or Emeritus Membership (who does not choose to receive the journal)*

A member of USCAP or Papanicolaou Society of Cytopathology must sign this form supporting this application:

As a member of PSC or USCAP, I sponsor this applicant for membership.

_____ _____
Sponsor's Name Sponsor's Signature

Date:_____/ _____/_____

Signature of Program Director required for Residents and Fellows:

_____ _____
Director's Name Director's Signature

Date:_____/ _____/_____

Please make checks payable to: Papanicolaou Society of Cytopathology
This application should be accompanied by a check for the Society's annual dues in the amount of $135 (U.S., Mexico), $143 (Canada) or $195 (other countries). *A membership discount is available for residents, fellows, Ph.D. candidates and Emeritus members at an annual cost of $25. This level of membership does not include a subscription to Diagnostic Cytopathology. If the journal is desired, please choose the regular membership.

Please Mail all materials to:
Ursula Bedrossian, Ph.D., Treasurer
Papanicolaou Society of Cytopathology
245 South Cuyler
Oak Park, IL 60302

Date Accepted for membership:_____/ _____/_____

2007 PSC USCAP EVENING COMPANION MEETING

CHANGING PRACTICE PATTERNS USING SMALL TISSUE PATHOLOGY

Moderator: Lester Layfield, M.D.
University of Utah School of Medicine, Salt Lake City, Utah

The Papanicolaou Society Scientific Session presented at the USCAP annual meeting offers a yearly update on issues in cytopathology important to both cytopathologists and general anatomic pathologists. This year the Papanicolaou Society of Cytopathology will be presenting its annual scientific companion meeting on Saturday, March 24, 2007, at 7:00 p.m. The seminar entitled "***Changing Practice Patterns Using Small Tissue Pathology***" will highlight the advantages of a combined histologic and cytologic approach to the diagnosis of neoplasms at many body sites. While histopathology and cytopathology have at times been perceived as competingmethodologies, the present seminar will demonstrate the value of a combined cytologic and histologic approach to the diagnosis of neoplasms. The symposium is designed to update the practicing pathologist on cytologic methods useful as adjunctive techniques to surgical pathology as well as alternatives to standard surgical pathology techniques. ***Steven Silverberg, M.D.*** will open the discussion with a review of intraoperative cytology and its contributions to diagnosis, both past and present. ***Ruth Katz, M.D.*** will discuss the essentials of FNA diagnosis of lymphoma. She will summarize what oncologists need to know from a cytologic investigation of lymphomatous lesions. ***Matthew Zarka, M.D.*** will discuss intraoperative cytology of CNS lesions and describe evaluation methods of CNS cytopathology by pattern recognition. The session will be closed by a discussion of the usefulness of FNA in the diagnosis of breast lesions by ***Britt-Marie Ljung, M.D.***. She will compare and contrast the accuracy and usefulness of FNA versus core biopsy in the diagnosis of breast lesions. The seminar is meant to update the practicing pathologist regarding the symbiosis between cytopathology and histopathology. Areas where cytopathology can significantly speed or improve the diagnosis of neoplastic lesions will be specifically addressed. This should prove to be an informative and useful update on the combined use of cytologic and histopathologic techniques for the diagnosis of a variety of neoplasms at several body sites.

The evening companion meeting schedule is as follows:

7:00 pm **Introduction** - Lester J. Layfield, M.D., Professor of Pathology, Department of Pathology, University of Utah School of Medicine, Salt Lake City, UT

7:15 pm **Intraoperative Cytology – Past, Present and Future** - Steven Silverberg, M.D., Professor of Pathology, Department of Pathology, University of Maryland School of Medicine, Baltimore, M.D.

7:45 pm **Essentials of FNA of Lymphoma: What the Oncologist Needs to Know From the Pathologist in Order to Treat the Patient** - Ruth L. Katz, M.D., Professor of Pathology, Chief Research Cytopathology, Director Image Cytometry Diagnostic Laboratory, University of Texas, M.D. Anderson Cancer Center, Houston, TX

8:15 pm **Intraoperative CNS Cytology by Pattern Recognition** - Matthew A. Zarka, M.D., Director of Cytopathology, Mayo Clinic Scottsdale, Scottsdale, AZ

8:45 pm **Accuracy and Usefulness of FNA versus Core Biopsy in the Diagnosis of Breast Lesions** - Britt-Marie Ljung, M.D., Professor and Vice-Chair, Director of Training in Cytopathology, Department of Pathology, University of California, San Francisco, CA

MEDICAL-LEGAL CONNECTION

PART II. THE EVOLVING STANDARD OF CARE AND THE ROLE OF NEW TECHNOLOGIES IN RISK REDUCTION

Mark S. Sidoti, Esq

A discussion of the standard of care applicable to cervical cytology screening, and the ways in which use of the new technologies can reduce liability risk for laboratorians and their clinicians clients.

This article is the second in a two part series. Part I, entitled "Liability Risk Reduction Benefits of New Cervical Cancer Screening Technologies" appeared in Volume 13, No.1 of Focus. Mr. Sidoti has served as a consultant for laboratories and new technology cervical screening companies and laboratories, including Quest Diagnostics Incorporated, Teterboro, NJ and Digene Corporation, Gaithersburg, M.D.

Most simply stated, the standard of care or "standard of practice" is the standard practice followed by the reasonably qualified practitioner (gynecologist, cytotechnologist or pathologist) in the community. The simplicity of this definition belies its true complexity. In the risk management realm, "standard of care/practice" is a concept ripe with potential for manipulation and modification, and certainly represents a "moving target" for those seeking to comply with the accepted standards and minimize risk. Moreover, it is important to appreciate that the concept of a local "community" has been increasingly eroded and, with the advent of the internet and increased information sharing, replaced by the concept of a national, and in some cases, an international one. This is particularly the case in cervical cancer and cytopathology litigation, which, in most instances, applies a "national community" standard of care to the actions of laboratory professionals and clinicians alike. As in most medical realms, there are several primary sources of the "standard of care" in gynecology and cytopathology:

- Regulations and Standards
- Learned Treatises, Articles and Guidelines
- The Opinions of Litigation "Experts"
- Individual Clinical Practices
- Advancements in Testing Technology

As with any heavily regulated industry, laboratory science carries with it a complex network of standards, laws and guidelines which form a substantial part of the "standard of care" brought into sharp focus by the American judicial system. Indeed, due to the publicity of the late 1980s, which spawned the first Bethesda conference and significant updates to the CLIA regulations, cervical cytopathology is perhaps the most highly regulated aspect of laboratory science.

The CLIA Amendments of 1988 of course set the regulatory stage for cervical cytopathology. Almost all state legislatures have either adopted the CLIA regulations wholesale, or enacted their own standards for cervical cytopathology practice. In some cases, such as New York, these standards are more stringent than those in CLIA. CLIA regulates virtually all aspects of cervical cytopathology practice, from the qualifications of Lab Directors and Technical Supervisors, to the guidelines for retrospective review and corrective reports, to quality control and assurance requirements, to the number of slides cytotechnologists may screen in an 8 hour workday. Many of these regulations have themselves spawned endless expert debate and infighting in the highest ranks of the cytopathology community regarding their proper interpretation and application. One example is the 5 year retrospective review requirement, which many argue does not require laboratories to make a verbatim (and potentially discoverable) record of actual assessment modifications unless the modifications fulfills the criteria for issuance of a corrective report, a relatively rare circumstance. Others contend that such records should be maintained.

In the field of gynecology, practice and technical bulletins and published guidelines (now often available to the general public via website postings) adopted by leading organizations such as the American College of Obstetrics and Gynecology (AGOG), and the American Society for Colposcopy and Cervical Pathology (ASCCP), are often looked to as a guide to establish the standard of care.

Learned Treatises, Articles and Guidelines

In both fields, excerpts from so called "learned treatises" (such as Richard De May's "The Art & Science of Cytopathology" and Hoskin's "Principles and Practices of Gynecologic Oncology") are commonly cited as establishing the accepted standards in the community. Peer reviewed Journals, such as ACOG's Green Journal and ASCCP's Journal of Lower Genital Tract Disease, provide additional sources.

As one might imagine, the vast amounts of information, data, analysis and opinion contained in these innumerable resources make establishment of, and compliance with, unified standards immensely difficult. Moreover, cross-over application of many of these guidelines complicates the matter. For example, the Guidelines for Review of Pap Smears in the Context of Litigation, adopted several years ago by the College of American Pathologists and American Society of Cytopathology (and subsequently by many state cytopathology organizations), establish guidelines which bear upon the appropriateness of retrospective Pap smear review in a legal context. These address the precise issue of whether certain discrepancies noted in such a context should reasonably form the basis for a claim of deviation form accepted standards. While at first blush these Guidelines appear applicable only to the practice of cytopathology, there is a very real correlation between the risk of laboratory litigation they seek to contain, and the involvement of gynecologists in the same potential lawsuits. Simply put, if, as the Guidelines make clear, disputed cases

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of ASCUS should not form the basis for a claim of deviation, less filings against both laboratories and gynecologists will result.

The Opinions of Litigation "Experts"

Additionally, the role of the litigation expert's opinion in framing the standard of care should never be minimized. Much has been written regarding the need for ethical and professional ramifications for practitioners who advocate untenable or not generally accepted theories of liability in a litigation context. Indeed, most organizations - including ACOG and CAP - have sought to control this problem through the issuance of voluntary guidelines, like those noted above. Unfortunately, most attempts have been unsuccessful; policing large groups of professionals in the application of national standards is a monumental undertaking, made even more difficult when the disciplines involved are the subject of intense and, at times, controversial regulatory schemes. Of course, the plaintiff's bar in the United States, long known as the strongest and most influential political lobbying organization in the Country, places significant obstacles to maintaining control over expert opinion at every turn. In short, it appears for the foreseeable future that there will always be "experts" willing to argue the inapplicability of accepted practices and guidelines -- or, in fact, that certain practices and guidelines are not generally accepted -- in support of what would otherwise be tenuous legal claims. The real danger here, however, is that in the microcosm of the individual lawsuit, these opinions, if ultimately given more weight by a jury than opposing views, are capable of establishing a standard of care that affects not only the lawsuit at hand, but future cases.

Individual Clinical Practices

Against this complex and interconnected framework of evolving regulations, guidelines, and expert opinion, the practitioner's own standards also play a role. Most gynecologists have developed and attempted to uniformly apply standards of practice in the context of cervical cancer detection and treatment. In most instances, these standards comply with those generally accepted in the "national community," as derived from the learned treaties and peer-reviewed sources mentioned above. For those who fail to practice in accordance with these standards, the implications are obvious. Less apparent, perhaps, are the hidden pitfalls of failing to comply with self-created standards which exceed those that have attained formal adoption status in the community. This is the classic application of something that "gives with one hand, yet takes away with the other." By way of example, many practitioners institute specific protocols for notification of patients with abnormal (and in some cases, normal) cytopathology results. This is clearly a laudable practice, although not one that is the subject of significant regulation. Clearly, providing specific notification to patients at increased risk of the need for follow up care can significantly reduce litigation risk to the clinician. On the other hand, such voluntary practices establish personal standards of care which can be used to establish deviation when, through a clerical oversight or otherwise, an at-risk patient does not receive her postcard in the mail urging her to return for follow up.

Advancements in Testing Technology

Finally, newly developed and proven technologies that enhance the practitioner's ability to accurately assess the presence or absence of disease and institute appropriate follow up care or treatment may also establish the standard of care. The fundamental premise is not difficult to understand - treatises and practice guidelines in the medical arena all derive from proven practices and treatment protocols. In the field of medical testing, those tests that provide the greatest sensitivity and specificity will become the standard that the general public and the medical community expect will be offered to the patient population. Where the accepted tests at issue have well-recognized limitations - for example PSA, mammography, and, of course, the conventional Pap smear - public and academic attention will constantly be focused on enhancements which are proven to reliably increase the efficacy of the underlying test. When such technologies are discovered, tested and proven effective, and certainly when they are recognized by national regulatory and standard setting organizations such as the FDA, it quickly becomes expected that clinicians will not only be knowledgeable about them, but make them available to their patient populations. While newly recognized and approved technologies will always have learned detractors and skeptics, effective risk management protocols and the concept of informed consent require the prudent practitioner to be aware of these enhancements and, where appropriate, offer them to their patients. These patients will be first to remind the clinician -- often in the context of a malpractice suit following an adverse outcome -- that the best available testing/care was not provided.

This is particularly the case in the field of cervical cancer detection. For years, the limitations of the conventional Pap smear have been the subject of vast media attention and sharp legal focus. Against that background, the development and marked success of liquid based cytology, credited with dramatically improving sensitivity and reducing the limitations associated with conventional preparations, has reached the point where many would argue that this testing (or at least education of the patient as to the availability of this test) is, in fact, the standard of care in cervical cancer screening.

Clearly, advances in gene-based HPV detection and the implications of these advances for assessing the cervical cancer risk status of women are following a similar path. Adoption of the FDA approved uses of gene-based HPV testing in cervical cancer detection regimen would appear to provide clinicians with an effective approach to risk control in future litigated matters, even in advance of unquestionable standard of care consensus in the community. In fact, clinicians who feel that "standard of care" status for this technology has not yet been formally attained may effectively argue that they went "above and beyond" the formally recognized standards in offering or providing such testing to their patients, but -- critically -- did so in a prudent manner given the proven efficacy and the FDA's formal approval of this testing.

While the health of their patient population is always paramount in this analysis, the relationship of addressing this paramount concern to the reduction of liability risk for the practitioner should be apparent. In sum, performing or offering patients gene-based HPV testing within the FDA approved parameters provides the following benefits:

- Allows the clinician to reduce the overall number of cervical cancer incidents which, in addition to clearly benefiting the patient population, significantly reduces the risk of being involved in a malpractice suit arising out of a cervical cancer diagnosis;
- Reduces reliance on the imperfect Pap test alone to determine risk status of the patient;
- Minimizes the effect of imperfect, patient-provided cytology and gyn symptomatology history in the risk assessment process;
- May minimize the effect of imperfect annual follow up by patients

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(although this is somewhat offset by the increased possibility of patients being lost to follow up as a result of the extended pap smear interval when concurrent HPV screening and pap results are both negative); and

- Provides the clinician with the ability to claim that the newest approved and proven effective technology was used (or offered) and supports the clinician's position that he or she has practiced consistent with the highest standard of care.

While adhering to these suggestions will certainly not result in perfect patient care or fully insulate even the most prudent clinicians from liability, one thing is certain: failure to do so puts the clinician at increased risk if cancer develops during the process of screening with less sensitive tests.

EXPERT'S CORNER

Endoscopic Ultrasound Guided Fine Needle Aspiration Biopsy of the Pancreas:

A Morphology Primer.

PART II. CYSTIC MASSES

Martha Bishop Pitman, M.D.

Massachusetts General Hospital, Boston, MA

Pancreatic cysts are uncommon compared to solid masses with only about 10% of pancreatic neoplasms represented by this category. The most important job for the pathologist is to distinguish non-neoplastic cysts that can be medically managed from neoplastic cysts that are typically resected. Mucinous cysts are especially important to recognize given their malignant potential. The new 4th series AFIP fascicle, *Tumors of the Pancreas* (in press), subclassification of the most common primary pancreatic cysts is as follows:

Pseudocyst

Serous cystadenoma

Mucinous cystic neoplasm (MCN)

- ➢ Mucinous cystic neoplasm with low grade dysplasia (adenoma)
- ➢ Mucinous cystic neoplasm with moderate dysplasia
- ➢ Mucinous cystic neoplasm with carcinoma in-situ
- ➢ Mucinous cystic neoplasm with invasive carcinoma

Intraductal papillary mucinous neoplasm (IPMN)

- ➢ Intraductal papillary mucinous neoplasm with low grade dysplasia (adenoma)
- ➢ Intraductal papillary mucinous neoplasm with moderate dysplasia
- ➢ Intraductal papillary mucinous neoplasm with carcinoma in-situ
- ➢ Intraductal papillary mucinous neoplasm with invasive carcinoma

This list includes only those primary pancreatic cysts most commonly encountered by endoscopic ultrasound guided biopsy (EUS-FNAB). Solid tumors that become cystic secondarily should always be considered in the evaluation of an aspiration of a cystic mass lesion, but inclusion of them here is beyond the scope of this brief review.

A multimodal approach is particularly important in the interpretation of pancreatic cysts. Combining the clinical, EUS features, gross cyst fluid, special stains for mucin and cyst fluid analysis for amylase and CEA can greatly enhance the overall cytological interpretation.

Pseudocyst

A pancreatic pseudocyst is a localized collection of pancreatic secretions, necrotic debris and blood, that by definition, has no epithelial lining. Pseudocysts occur as a consequence of damage to the pancreatic parenchyma that results in hemorrhage, necrosis and autodigestion of pancreatic tissue from the release and activation of pancreatic enzymes. This pancreatic injury and, thus incidence, is most common in patients with alcohol abuse. Approximately 10% of patients with acute pancreatitis will develop a pseudocyst. The age and gender of patients with pseudocysts parallels that of pancreatitis. Alcohol related pseudocysts are more common in middle-aged men while pseudocysts secondary to trauma, biliary disease and heredity pancreatitis are relatively equal in men and women. Pseudocysts can be complicated by rupture, hemorrhage due to erosion into a vessel, obstruction of surrounding structures and infection. Pseudocysts may be medically managed, but most are drained or resected.

Pseudocysts are usually solitary, small to very large (up to 20 cm), well-demarcated, thin walled, unilocular, non-septated, mostly peripancreatic cysts that can occur anywhere in the pancreas, but are most common in the pancreatic tail.

The cyst fluid aspirated from an uncomplicated pseudocyst is generally thin, clear or brown to green and non-mucinous. A complicated pseudocyst, however, may produce thick mucoid appearing fluid due to the presence of inflammation. Cytologically, the characteristic features include degenerative cyst debris with acute and chronic inflammatory cells, histiocytes, hemosiderin and often bile (Figure 1). By definition, there are no cyst lining epithelial cells. Care must be taken not to misinterpret histiocytes as epithelial cells. Contamination of injured

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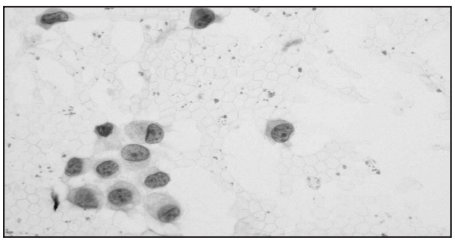

Figure 1. Pseudocyst

acinar epithelium in the setting of pancreatitis can produce what appears to be a neoplastic proliferation of small monotonous single cells leading to a false interpretation of a cystic pancreatic endocrine neo plasm or cystic acinar cell carcinoma. Additionally, gastrointestinal contamination, particularly from the stomach, can lead to a misdiagnosis of a mucinous cyst.

To exclude a mucinous cyst, testing the fluid for thin mucin not appreciated on routine cytology can be done on cytospin preparations. The typical special stains for mucin include mucicarmine and Alcian blue, pH 2.5. Chemical analysis of the fluid for amylase and carcinoembryonic antigen (CEA) is also very helpful. Amylase is consistently elevated in pseudocysts due to the connectivity of the cyst with the pancreatic ductal system. A cyst fluid with a very low amylase level is highly unlikely to be a pseudocyst. Pseudocysts typically have an undetectable or very low CEA level, whereas mucinous cysts generally have levels of CEA >200 ng/ml.

Serous Cystadenoma

Serous cystadenoma is a benign, typically microcystic, proliferation of small cuboidal epithelial cells rich in cytoplasmic glycogen that produces serous fluid. The incidence of these often asymptomatic neoplasms is increasing with the common use of CT scanning for work-up of patients for other conditions. Of all the neoplasms arising from the exocrine pancreas, serous cystadenomas account for roughly 2%, but of resected cysts of the pancreas, the percentage increases to 10%. There is an association with von Hippel-Lindau syndrome. Serous cystadenomas are much more common in women than men and have greater than a 70 year age range (18-91 years) with a mean of approximately 65 years. These neoplasms are benign with very rare reports of malignant transformation. Complications of large neoplasms such as rupture or erosion into a large vessel can cause death. Complete surgical resection is curative. Not all suspected serous cystadenomas are resected, however, so cytological confirmation of the neoplasm is important in such cases. Most patients are elderly with co-morbid conditions and small (< 4 cm) asymptomatic neoplasms are not likely to pose a serious medical threat compared to the operative morbidity.

Microcystic serous cystadenoma may demonstrate very characteristic radiographic findings. Ultrasound demonstrates a "soap bubble" pattern owing to the numerous microcysts that average less than 2 cm each. CT scan shows a well-defined mass with multiple, sometimes innumerable, small cysts separated by delicate septa. Many tumors will contain a central stellate scar, and about 30% of these will demonstrate a "star burst pattern" of microcalcifications within the scar. Oligocystic and unilocular variants of serous cystadenomas do exist and produce radiologic macrocystic features that usually cannot be distinguished from other cysts in the pancreas.

The fluid aspirated from serous cystadenomas is clear and thin and may be bloody, but is not mucoid as in most mucinous cysts. Smears are frequently very paucicellular and it is not uncommon for smears to be acellular. Hemosiderin-laden macrophages may be a prominent component of the aspirate, a finding that in the absence of epithelium, may lead to a misinterpretation of a pseudocyst. Many cases are considered inadequate for interpretation due to insufficient cellularity, but identification of even a couple of small clusters of cells with bland cuboidal morphology can be very helpful in the appropriate clinical setting, even if not technically considered " diagnostic".

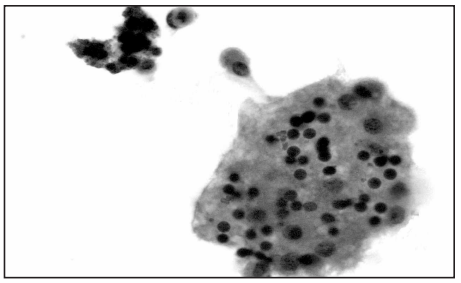

Figure 2. Serous Cystadenoma

Tumor cells are uniform cuboidal cells in small clusters and flat sheets with round central to slightly eccentric nuclei and scant but visible cytoplasm that is homogenous to finely vacuolated. The nuclei have smooth nuclear membranes, an even chromatin pattern, inconspicuous to no nucleoli, and the cytoplasm is scant and finely vacuolated or dense, but not mucinous (Figure 2). PAS stain with and without diastase will confirm the presence of cytoplasmic glycogen and exclude the presence of mucin. Cyst fluid analysis typically shows low levels of amylase and CEA, but the CEA level can occasionally be around 200 ng/ml, sometimes higher.

Bloody specimens that may contain inflammation and debris and lack epithelial cells can be misinterpreted as pseudocysts. As noted above, pseudocysts should have an elevated amylase level and a low CEA. Gastrointestinal contamination of the specimen can lead to a misinterpretation of a mucinous cyst.

Mucinous Cysts: Mucinous Cystic Neoplasm and Intraductal Papillary Mucinous Neoplasm

Primary neoplastic mucin producing cysts (NMC) of the pancreas include mucinous cystic neoplasms (MCN) and intraductal papillary mucinous neoplasms (IPMN). Mucinous cystic neoplasm is a NMC that, in almost all cases, does not communicate with the pancreatic ductal system, is lined by mucinous epithelial cells with varying degrees of atypia, and contains subepithelial ovarian type stroma. This stromal component is not seen on FNAB. Mucinous cystic neoplasms comprise approximately 6% of all primary pancreatic tumors. With rare exception, patients are female and the average age is between 40 and 50 years. Mucinous cystic neoplasms with invasive carcinoma tend to occur in patients nearly a decade older. Complete surgical resection is the treatment of choice. Regardless of the atypia of the lining epithelium, the prognosis is directly related to the presence or absence of an invasive carcinoma. As such, cytological evaluation cannot predict outcome. Complete and thorough histological sampling is essential to rule out an invasive component given that these neoplasms tend to be very heterogenous in their lining, and that an invasive component may not be apparent from gross inspection of the resected cyst. Complete resection of thoroughly evaluated, noninvasive cysts is considered curative.

Intraductal papillary mucinous neoplasm is a NMC that arises from and is directly connected with the pancreatic ductal system, either the main duct and/or side branch duct, and is lined by typically papillary and variably atypical mucinous epithelium. It is difficult to establish an accurate incidence of IPMN owing to its relatively recent distinction as a specific entity separate from mucinous cystic neoplasms in the mid-1980's and from serous cysts in the 1970's. In addition, many small asymptomatic neoplasms are being incidentally recognized because of the increasing use of CT scans for other conditions. An estimated incidence from recent reports places IPMN at approximately 20% of all neoplastic pancreatic cysts and 5% of all pancreatic neoplasms. Most IPMNs occur in the elderly population with a peak age of close to 65 years. The male to female ratio varies by study and institution, but most studies show a slight male predominance. Complete surgical resection is

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currently the treatment of choice. Like MCN, prognosis is directly related to the presence or absence of an invasive carcinoma. Complete and thorough histological sampling is essential to rule out an invasive component given that these neoplasms tend to be very heterogenous in their lining, and that an invasive component may not be apparent from gross inspection of the resected cyst. Non-invasive IPMNs have a greater than 90% 5 year survival rate. This rate drops to 40% in IPMNs with invasive carcinoma, but this rate is still significantly better than conventional ductal adenocarcinoma. The prognosis also depends on the type of IPMN and the type and size of the invasive component. Side branch IPMNs are reported to behave better than main duct and combined type IPMNs, and the invasive IPMNs with colloid carcinoma are reported to have a better prognosis than those with invasive conventional tubular type carcinoma.

Aspiration of NMC produce highly variable amounts of extracellular mucin and cyst lining epithelium. In addition, the degree of epithelial atypia may be variable and not representative of the highest degree of atypia of the cyst on histology owing to the heterogeneity of the cyst lining. As such, the cytological diagnosis often underestimates the ultimate histological grade of these tumors. In addition, a specific diagnosis of MCN or IPMN is less common than a more general diagnosis of NMC. This is primarily due to either a complete absence of epithelium or a lack of architectural specificity of the glandular epithelium.

The presence of a NMC is often first suspected at the time of aspiration when thick, viscous mucous is grossly appreciated by the aspirator. This mucus is difficult to draw into and express from the needle. Such thick and viscous cyst fluid is reflected on the slide as a thick, sheet of "colloid-like" mucin that frequently covers most of the slide (Figure 3). Mucin contamination from the gastrointestinal tract will not be "colloid-like". Mucin stains are not needed in these cases. Degenerated inflammatory cells and histiocytes within the mucin is a feature that also helps to distinguish contaminating mucin from neoplastic mucin. The very presence of this type of mucin is sufficient in and of itself even without epithelial cells to make a diagnosis of a neoplastic mucinous cyst. However, not all NMC will have such mucoid contents. The appearance of extracellular mucin can appear as focally thick clumps, thin wisps and as focal or diffuse thin background mucin not easily visualized on routine preparations. An aliquot of the cyst fluid, if sufficient in quantity, can be used to prepare cytospin slides for mucicarmine and/or Alcian blue pH 2.5 to assess for mucin. Negative special stains, however, do not exclude the presence of a NMC.

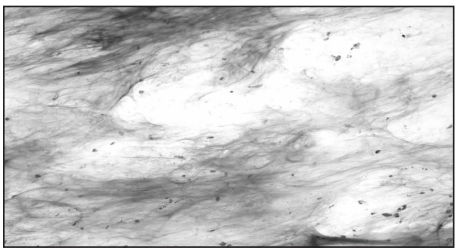

Figure 3. Thick Mucin in NMC

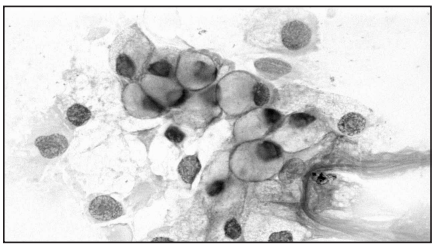

Figure 4. Adenoma

NMCs with low-grade dysplasia (adenomas of either MCN or IPMN) are typically scantily cellular, aspirates producing single cells, small clusters and flat sheets of bland glandular epithelial cells that typically demonstrate cytoplasmic mucin visible on routine light microscopy. The nuclei are basally located, round and regular with even chromatin and inconspicuous to occasionally prominent nucleoli (Figure 4). Occasionally muciphages (foamy histocytes) may be the only cells in the cyst contents. A cyst lining of moderate dysplasia or higher-grade neoplasms demonstrate epithelial cells with nuclear crowding, loss of polarity, nuclear elongation or rounding, hyperchromasia, and increased nuclear to cytoplasmic ratio. Cells in small, tight, bud-like clusters or singly with these same nuclear features, and cytoplasm with or without mucin, is also consistent with the presence of a cyst with moderate dysplasia or higher (Figure 5). Crowded groups of cells with open chromatin, irregular nuclear membranes and nucleoli, significant background inflammation andnecrosis supports the interpretation of carcinoma (Figure 6). Invasion is also suggested by the presence of multiple septations, a thick cyst wall and by the presence of a mural nodule. Direct invasion of adjacent structures may also be seen on EUS. The cytological features of the cyst fluid distinguishing in-situ from invasive carcinoma have not been established, but necrosis has been found to correlate with invasion.

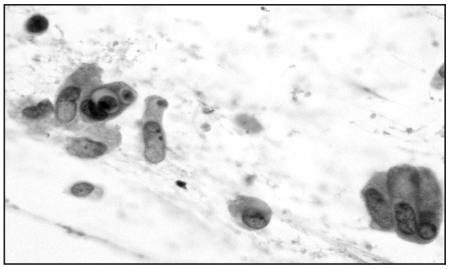

Figure 5. Moderate Dysplasia

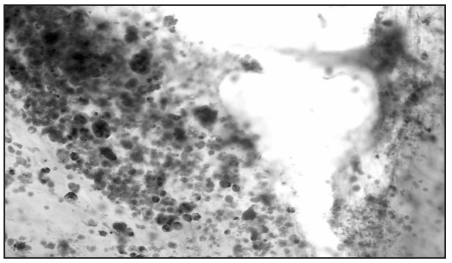

Figure 6. Necrosis

Chemical analysis of the cyst fluid can aid in the diagnosis and classification of mucinous pancreatic cysts. Carcinoembryonic antigen levels above 200 ng/ml have been found to correlate with the presence of a mucinous cyst with very high levels of CEA correlating with malignancy. Amylase levels are not high in MCN as in IPMN due to the absence of connectivity with the pancreatic duct.

Mucin retention cysts are rarely larger than 1 cm and typically do not contain the thick mucin of a neoplastic mucinous cyst. Distinction of NMC-adenomas from contaminating gastrointestinal epithelium is particularly challenging, especially gastric epithelium. In contrast to duodenal epithelium that is recognized by the presence of large, uniform, flat sheets of glandular epithelium with a brush-bordered luminal edge studded with goblet cells containing clear cytoplasm (Figure 7), gastric epithelium more often presents as small groups and occasionally as single columnar glandular epithelial cells that may have cytoplasmic mucin but the mucin is typically confined to the apical third of the cytoplasmic compartment in contrast to the that of an adenoma (Figure 8). Given the atypia present in cyst lining epithelial cells of cysts with moderate dysplasia or higher, gastric and duodenal contaminating epithelium should not pose a diagnostic pitfall in mucinous cysts with high grade dysplasia or carcinoma.

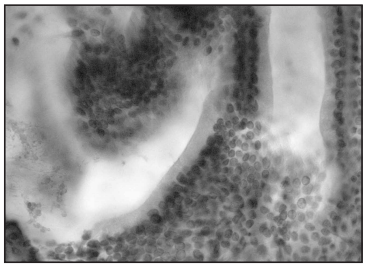

Figure 7. Duodenum

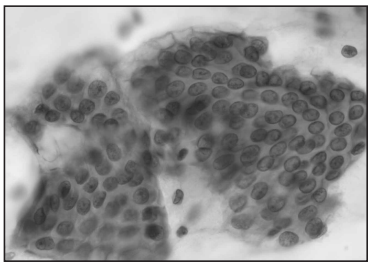

Figure 8. Stomach

**** References available upon request.***

FNA DIAGNOSIS OF LYMPHOID LESIONS: ROLE OF FLOW CYTOMETRY

Oscar Lin, M.D.
Memorial Sloan Kettering Cancer Center, New York, NY

The diagnosis of lymphoma by fine needle aspiration is still subject to controversy. There is a wide divergence among clinicians, hematopathologists and cytopathologists regarding the use of fine needle aspiration (FNA) specimens in the primary diagnosis of lymphoma. Hehn et al (Utility of fine-needle aspiration as a diagnostic technique in lymphoma. J Clin Oncol 2004; 22:3046-5) reported that cytology was unable to provide a specific diagnosis using the WHO classification, and most lesions (72%) required an excisional biopsy in their series. Also, in their study, there was poor correlation between the cytologic diagnosis and the excisional biopsy diagnosis. Conversely, Wakely et al (Fine-needle aspiration cytopathology in diagnosis and classification of malignant lymphoma: accurate and reliable? Diagn Cytopathol 2000; 22:120-5) showed that most studies of FNA of lymphomas demonstrated a sensitivity over 80% and a specificity over 90%. The discrepancy in results might be attributed to the fact that the majority of the cytologic diagnoses in the study by Hehn et al were based on morphologic findings only. Only a limited number of cases were subject to immunophenotypic analysis, which was based on immuno histochemistry, not flow cytometry. In contrast, most of the studies with high accuracy rate advocate the use of flow cytometry as an ancillary test.

The incorporation of the immunophenotype to the WHO classification and the ability of flow cytometry to distinguish low-grade lymphomas from reactive lymphoid conditions have enabled cytology to evolve from a screening test to a diagnostic test in lymphoid lesions. In order to achieve the greatest potential of flow cytometry in FNA specimens, the suggested panel of antibodies for the work-up of B-cell lymphoid lesions in flow cytometry includes: CD45, CD3, CD5, CD10, CD11c, CD19, CD20, CD22, CD23, CD25, FMC7, TdT, kappa and lambda. These markers would allow the classification of most low-grade B-cell lymphomas. For instance, the co-expression of CD5, CD20 and CD23 in a population of small lymphocytes would indicate chronic lymphocytic leukemia/small lymphocytic lymphoma, while the presence of expression of CD5, CD20 and FMC7 with absent expression of CD5 would suggest a mantle cell lymphoma. Co-expression of CD19 or CD20 with CD10 in a B-cell population with light chain restriction is suggestive of a follicle center cell origin. Unfortunately, there is no specific marker for marginal zone lymphoma, but the absence of expression of CD5 and CD10 in a clonal B-cell population might suggest a marginal zone lymphoma. The work-up for T-cell lymphoproliferative lesions is a little more complex because it relies in the loss or abnormal expression of pan-T cell markers. The optimal panel in the work-up of T-cell lympho-proliferative lesions should include CD2, CD3, CD4, CD5, CD7, CD8, CD56 and TdT. The loss of one or more pan-T cell markers such as CD3, CD5 or CD7 in a T-cell population is highly associated with T-cell lymphomas. The identification of TdT in atypical lymphoid population is consistent with lymphoblastic lymphoma, especially outside the anterior mediastinum.

The limitations of flow cytometry include: requirement of a large number of viable cells, absence of correlation between cell morphology and flow cytometry results and need of expensive sophisticated equipment with highly specialized personnel to operate it. The large number of viable cells required for flow cytometry studies might represent a major problem since it is critical for proper subclassification of lymphoid cells. Ideally, at least 0.1 x106 /ml cells should be available for each marker. Adequacy assessment during FNA procedures is the best way to ensure that adequate material is obtained for flow cytometry studies. In our institution, once a lesion is diagnosed as lymphoid in the immediate assessment of an FNA, 2-3 additional passes are performed and submitted exclusively for flow cytometry studies. We have been able to obtain good results, obtaining 3-5 x106 cells for flow cytometry studies. Some authors recommend the collection of an average of 20 x 106 cells in order to run a complete panel of markers and they use a blood analyzer to ensure that enough cells have been procured. The material obtained by FNA can be rinsed in RPMI® or in saline solution for specimen transport. Preference is given to RPMI® as preservation media since it has shown superior results in terms of cell preservation. The absence of correlation between flow cytometry results and morphology might induce a false negative diagnosis. The sensitivity of flow cytometry in large cell lymphomas is lower than in small cell lymphomas. This lower sensitivity might be related to the fact that large cells are more fragile and less viable during flow cytometry processing. Hodgkin lymphoma is another entity that could also benefit from a morphologic-flow cytometric correlation. The number of neoplastic cells is usually too low to be identified by flow cytometry and the presence of a polyclonal population should not induce a false-negative diagnosis.

Despite the many advantages of FNA and flow cytometry in the diagnosis of lymphomas, the oncologists in our institution are reluctant to treat a patient based solely on FNA and flow cytometry in cases of first time diagnosis. However, they are willing to accept it in cases of recurrence. In their opinion, it is easier for a surgical biopsy to provide sufficient material for an initial complete work up, including histological, immunohistochemical and molecular studies. Also, a tissue biopsy could provide enough material for future studies, if necessary. This fact does not invalidate the use of FNA and flow cytometry in the evaluation of lymphadenopathies of unknown etiology, when it assumes a role of screening method. Unnecessary surgical biopsies can be avoided if the lesion is deemed reactive.

In summary, flow cytometry plays a major role in the evaluation of lymphoid lesions in cytology specimens. It is particularly useful in the differential diagnosis between low-grade lymphomas and reactive lesions. The main pitfalls include large cell lymphomas and Hodgkin lymphoma.

**** References available upon request.***

U.S. Federal and State News

Joan Cangiarella, M.D. • New York University, New York, NY

HPV VACCINE APPROVED BY THE FDA

The HPV vaccine was approved for use by the FDA, in 9 to 26 year old females for protection against Human Papillomavirus Infection, the leading cause of cervical cancer. Gardasil, manufactured by Merck and Company protects against HPV types 6, 11, 16 and 18. While HPV types 16 and 18 are responsible for the great majority of cervical cancer cases, types 6 and 11 cause genital warts. The vaccine would be administered as a series of three injections over a six month period. Further studies to evaluate safety, long term effectiveness and effectiveness in males are ongoing.

CMS PROVIDES UPDATE TO CLINICAL LABORATORY IMPROVEMENT AMENDMENTS OF 1988 (CLIA) GYNECOLOGIC CYTOLOGY PROFICIENCY TESTING

On March 6, 2006 CMS sent letters to all cytology laboratory directors who conduct gynecologic cytology testing to indicate that in 2006 the educational approach to national testing will continue. In the educational approach, if cytotechnologists and pathologists enroll in a CMS approved testing program for the CY 2006 testing cycle and all are tested in a timely manner in accordance with the regulatory protocol in 2006 the laboratory will not have deficiencies cited or sanctions imposed against their CLIA certificate. Expansion of the CMS approved programs now include the State of Maryland Cytology PT program, the American Society of Clinical Pathology (formerly MIME) and the College of American Pathologists. CMS has also agreed to collaborate with the Centers for Disease Control and the cytology community to form a Clinical Laboratory Improvement Advisory Committee (CLIAC) work group dedicated to reviewing cytology proficiency testing including frequency of testing, scoring, and diagnostic categories used in the testing. CMS has also updated the Cytology PT Informational Supplement that addresses frequently asked questions and provides additional information on cytology proficiency testing. It can be viewed on the internet at www.cms.hhs.gov/clia/.

BECTON DICKINSON AND COMPANY MAKES PUBLIC FILING TO ACQUIRE TRIPATH IMAGING, INC.

On August 14, 2006 Becton Dickinson and Company (BD) made a public filing under Section 13 of the Securities and Exchange Act of 1934 to propose the acquisition of Tripath Imaging, Inc. Through its Tripath Oncology unit, Tripath Imaging has worked with BD to develop and market molecular markers for cancers of the breast, skin, ovary, cervix and prostate. This public filing was required as BD already owns approximately 6.5% of Tripath Imaging's outstanding stock.

EFFECTIVE SEPTEMBER 1, 2006 NEW YORK STATE REQUIRES LICENSURE FOR ALL CLINICAL LABORATORY TECHNOLOGISTS AND CYTOTECHNOLOGISTS

The Clinical Laboratory Technology Practice Act goes into effect on September 1, 2006 in New York State and requires licensure of all cytotechnologists. Requirements for licensure include:

a. filing an application with the state,

b. education in cytotechnology (B.A. in cytotechnology from a registered program or determined equivalent or hold a bachelor's degree that has a minimum number of credit hours in the sciences and received clinical education in an accredited cytotechnology program or a program determined to be equivalent)

c. pass an examination

d. be 18 years of age

e. be of good moral character

f. payment of an initial $175 fee and $175 for each triennial registration period.

There are broad special provisions that allow grandfathering of currently practicing Cytotechnologists that have met the 2 years experience (2880 clock hours) within the last 5 years and educational requirements. Further information can be found at http://www.op.nysed.gov/clp.htm

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The members of the Papanicolaou Society of Cytopathology thank you for your generous support.

Bulletin Board

Papanicolaou Society Committees and Task Forces

LC Tao Educator of the Year Award Committee: The committee's charge is to select the best candidate for the PSC Educator of the Year Award. Carlos Bedrossian, M.D., Ph.D. was the recipient of the 2006 award. Claire Michael, Chair, clairemi@med.umich.edu Members: K Geisinger, BC Priollet, S Rollins, R Davila

Yolanda Oertel Interventional Cytopathologist Award Committee: The committee's charge is to select the best candidate for the PSC Interventional Cytopathologist Award. Sixten Franzen, M.D. received the 2006 award. Britt-Marie Ljung, Chair, britt-marie.ljung@ucsf.edu Members: P Viehl, Y Oertel, S Rollins, J Waisman

Budget and Finance Committee: The committee prepares a budget for the ensuing year in concert with the treasurer, recommends a change in membership dues if and when necessary, and recommends ways to increase the financial stability of the PSC. The annual treasurer's report is published in the fall issue of the PSC newsletter. Martha Bishop Pitman, Chair, mpitman@partners.org Members: M Zarka, R Tambouret, M Cohen, W Faquin, U Bedrossian (ex officio)

Constitution and Bylaws Committee: The Constitution and ByLaws Committee updates the Constitution and ByLaws as necessary. Steve Raab, Chair, raabss@upmc.edu Members: Executive Board and Officers

Program Development Committee: The committee's goal is to raise funds to support the various programs and activities of the PSC. Steve Raab, Chair, raabss@upmc.edu

Publication Committee: The Publication Committee prepares and publishes the biannual PSC newsletter "Focus". Focus is published online, and also, is mailed to all PSC members through a generous donation from Cytyc Corporation. The newsletter aims to disseminate information related to the past and upcoming PSC events, society related news, new developments and timely topics associated with the practice of cytopathology. Aylin Simsir, Chair, aylin.simsir@med.nyu.edu Members: J Cangiarella, O Lin, I Eltoum, A Fischer

Scientific Program Committee: The committee has selected and developed what we hope will be an exciting and timely program for the 2007 San Diego annual meeting of the USCAP/PSC. Detailed information is provided in the current issue of the newsletter. Lester Layfield, Chair, adam.alba@aruplab.com Members: M Pitman, M Zakowski, H Cramer, T Elsheik, Y Oertel

Education & Training Committee: The committee continues to publish interesting cases on the PSC website. The committee is currently in the process of preparing a series of cytopathology books to be published under the auspices of the PSC. David Chhieng, Chair, dchhieng@path.uab.edu Members: A Afify, J Cangairella, O Lin, L Fowler, S Ali

PCS Website Committee: The committee has been working to update the PSC webpage including the application of several new features that may be beneficial to PSC members. The following additions were made to the PSC website in 2005: A password protected directory of PSC members, published guidelines from the PSC (courtesy of Diagnostic Cytopathology), link to cytology stuff.com (an educational service provided by Cytyc Corp., Boxborough, MA), link to CytoJournal. Planned activities for 2006 are installation of a library of cytopathology images, expanding the links to include other secientific journals such as Cancer Cytopathology and other pertinent websites, and establishment of "Collaboration Corner" which would allow cytopathologists to collaborate on research projects. Rana Hoda, Chair, hodars@musc.edu Members: P Gupta, R Bardales, V Shidham, M Aktar, V Schneider, J Madory

Government Relations Committee: The Government Relations Task Force monitors legislative and regulatory issues, and proposes areas for advocacy efforts by the membership. The Task Force communicates, and partners with other medical and cytopathology organizations including the CAP, ASC, and AMA, on topics important to cytopathology. This year, the Task Force has been monitoring mainly the cytology proficiency testing. We published two detailed articles in the Oct 2005 and Nov 2006 issues of Focus entitled Update on Cytology Proficiency Testing. We also posted another update on the PSC list-serve in November 2005 which included information on how members could be active in advocacy and lobbying efforts related to PT. Diane Davey, Chair, e-mail: ddave2@mail.uky.edu Members: E Volk, G Birdsong, D Mody, RM Austin.

Research Committee: The purpose of the task force is to encourage quality research and exchange of ideas relevant to Cytopathology among pathologists-in-training. Its main task is to evaluate abstracts for the PSC Research Awards. For the PSC Research Awards, members of the research committee review cytopathology abstracts accepted for presentation at the USCAP annual meeting. Abstracts accepted for the USCAP Stowell-Orbison Award are automatically entered for the PSC Research Awards. All other cytopathology abstracts are entered if an application form is submitted to the chair of the research committee. Briefly, during the selection process the eligible abstracts are rendered anonymous by the chair of the research committee and scored by committee members based on novelty of idea, scientific and/or practical value and for the effort put in the study by the author. A total of 32 abstracts entered the PSC Research Award competition in 2006. Awardees

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were announced at the 2006 PSC USCAP Evening Companion Meeting and published in the April issue of Focus. Armando Filie, Chair, afilie@mail.nih.gov Members: SE Martin, H Ehya, R Pu, J Silverman

International Relations Committee: The function of this committee is the interchange of ideas and information between members and committees of various cytology organizations at the international level. The committee facilitates joint sessions among these organizations and assists PSC in the recruitment of prospective members. Carlos Bedrossian, Chair, carlos@bedrossians.com Members: R Hoda

Nominationg Committee: It is the charge of the nominating committee to produce a slate of nominees for all elections for the PSC. Kim Geisinger, Chair, kgeis@wfubmc.edu Members: M Sidawy, C Bedrossian

Standards of Practice Guidelines Committee: The charge of this committee for 2005-2006 is to formulate a set of recommendations/guidelines for thyroid fine-needle aspiration (FNA). This is being accomplished by forming various subcommittees to tackle different aspects of thyroid FNA (listed below). Each subcommittee presented their recommendations at the 2006 PSC USCAP evening session in Atlanta. After the meeting all recommendations/guidelines will be discussed and the final consensus will be published in Diagnostic Cytopathology.

Subcommittees:

1. Indications for FNA and technique (Drs. Pitman and Baloch)
2. Adequacy assessment and adequacy criteria (Drs. Oertel and Bourtsos)
3. Diagnostic terminology and criteria (Drs. Tarik, Faquin, Logani, and Zakowski)
4. Report format (Drs. Pitman, Cramer, Tarik, and Layfield)
5. Ancillary studies (Drs. Clark, Baloch, and Zakowski)

Zubair Baloch, Chair, baloch@mail.med.upenn.edu Members: D Clark, W Faquin, T Elsheik, S Logani

Membership Committee: The charge of the Membership Committee is to increase membership with a particular focus on recruiting junior members. Philippe Vielh, Cahir, vielh@igr.fr Members: E McGoogan, A Field, C Wright, D Chhieng

International Scientific Programs Committee: This year, along with the International Relations Committee, the Committee prepared the Annual Afternoon Scientific Session at the 2006 USCAP PSC Meeting in Atlanta. Moderated by Dr. Suba, the topic this year was "Cytologic screening for cancer in the real world: successes, failures, and cultural distractions". Experts from around the world shared their experiences in esophageal cancer screening in China (Dr. Sandy Dawsey), and cervical cancer screening in rural Kenya (Dr. Mark Titus), and Mexico (Dr. Matt Zarka). Eric Suba, Chair, Eric.Suba@kp.org Members: D Kaminski, M Duggan, S Raab

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