

**Radiologic Pathologic Correlation Course  
Case Selection and Requirements**



**Department of Radiologic Pathology**

Residents attending the Radiologic Pathologic Correlation Course are required to submit **ONE** pathologically proven case illustrating radiologic pathologic correlation. If a resident chooses to bring two cases, the second case must be a musculoskeletal case. If a second case is submitted, the resident will receive a complimentary copy of the next edition of the Radiologic Pathology Syllabus.

**IMPORTANT CASE INFORMATION FOR THE 2009-2010 ACADEMIC YEAR:**

- Please note that **USB storage devices are not allowed on DoD network**, if you need to print any document it is best to save a copy on a CD or email.
- Each resident is required to bring only **ONE** case.
- **DICOM3 images may be submitted on CD-rom only. The CD-rom must be created from a PACS. We cannot accept images directly from US, CT, or MR scanners.**
- The case should be made anonymous in accordance with your institutions HIPAA policy. Please make sure that the pathologic material submitted contains a patient identification number that matches the number on the pathology/autopsy report. Please try to retain MR pulse sequence information on the films. See page 8 for AFIP HIPPA guidelines.
- **DO NOT** bring cases on the first day of the course.
- **All** cases will be collected on assigned days during the **first week** of the course.
- Cases **MUST** be complete upon turn-in. We will not accept incomplete cases.
- Failure to submit cases may jeopardize the residency program being able to send residents to future courses
- **Bring only one copy of all supporting paperwork (Do not staple paper work).**

**CASE REQUIREMENTS.** Each case must have all of the following. The only exceptions permitted are outlined below by organ system.

1. **RADIOLOGIC STUDIES** (radiographs, sonograms, CT and MR scans, angiograms, nuclear medicine studies, mammograms, and specimen radiographs). **IMAGES MAY BE SUBMITTED AS HARD COPY FILM OR AS DICOME3 IMAGES ON A CD-ROM. WE WILL NOT ACCEPT JPEG OR TIFF FILE FORMATS FOR THE RADIOLOGIC STUDIES.**

- **DICOM CASES:** DICOM cases being submitted must adhere to the following rules and standards in order to conform to the policies stated below at AFIP, Department of Radiologic Pathology. These rules are set to comply with the DICOM 3 Standard Part 10 and Part 12 documents. The DICOM standard

documentation can be found at <http://medical.nema.org>. If you are submitting a DICOM case, please note the requirements below

1. DICOM 3 images may be submitted on CD-Rom only. The CD-Rom must be created from a PACS. We cannot accept directly from US, CT, or MR Scanners.
2. The case should be made anonymous in accordance with you institutions HIPAA policy.
3. One CD per DICOM case (any other images should be on a separate CD).
4. One patient per CD.
5. CD must contain only the following two items
  - DICOMDIR file
  - DICOM Folder
6. No viewer or any other file should reside on the root of the CD apart of the DICOMDIR file
7. Residents should check with the software provider of their Institution for the conformance to the production of DICOM 3 CD ROMs.
8. *If you have technical questions regarding DICOM files, please contact [webmaster@radpath.org](mailto:webmaster@radpath.org).*

➤ **HARD COPY FILM**

1. Please select the minimum number of films that adequately demonstrate an abnormality. Please do not submit films with permanent marks, arrows, or stickers
2. Reproduced films are unacceptable. Original films will be digitally archived, and promptly returned after duplication.

2. **GROSS IMAGES.** Cases must contain images of the gross specimen that correlate with the radiologic findings. The gross specimen must be a 2 x 2, 35-mm slide or a digital image. All slides and digital images will become permanent AFIP record material. No slides or digital images will be returned.

- *Gross specimen images must be oriented to correlate the gross morphology of the disease with the radiologic findings. Images of the resected specimen or an autopsy are best suited for this purpose; however, intraoperative, endoscopic, bronchoscopic, laparoscopic, or arthroscopic images are also acceptable.*
- **Digital images instructions.** *Gross images taken with a digital camera are only acceptable when taken at full resolution; using a three- (3) megapixel camera (the image size at full resolution is 2048 x 1536 pixels). Submit images on a CD disk in an uncompressed JPEG or TIFF file. Digital images in a PowerPoint presentation are unacceptable. If a second case is submitted, bring gross images for each case on separate CDs.*

- *Photomicrographs and/or clinical slides or digital images (e.g. images of a patient with Cushing Syndrome, neurofibromatosis, etc.) are useful, but are not a substitute for the required glass slide or gross image.*

3. **PATHOLOGIC MATERIAL.** Original or recut histology material (on glass slides) material must accompany each case. Tissue (paraffin blocks) is acceptable.

4. **SUPPORTING DOCUMENTATION** (bring one copy of each document)

- Computer Sheet\*
- Case Abstract\*
- Gross Pathology Caption Sheet\*
- Operative Report
- Pathology Report/Autopsy
- Radiology Report
- Discharge or Clinical Summary

\* Forms provided below

For questions or additional assistance, please contact the Case Manager:

Ms. Alethia West, (202) 782-2172, [westa@afip.osd.mil](mailto:westa@afip.osd.mil)

## INSTRUCTIONS BY ORGAN SYSTEM

All well-correlated pathologically proven cases are welcome. Cases from the following categories are highly preferred.

### **NEURORADIOLOGY/ HEAD AND NECK:**

- Primary neoplasms of the brain and spinal cord
- Infections
- White Matter Diseases
- Developmental disorders and anomalies (with gross photos and MR)
- Phakomatoses (especially with MR)
- Cerebrovascular Disease (especially with MR)
- Head and Neck Masses (including orbit)
- PET / SPECT thallium cases (radiation necrosis vs. tumor)
- Cases with MR spectroscopy, diffusion-weighted imaging, perfusion imaging, and other advanced imaging procedures

**We would greatly appreciate gross brain sections (or autopsy photographs) of both common and unusual conditions. Films submitted should portray the full extent of the lesion.**

### **MAMMOGRAPHY:**

One of the goals of the Department of Radiologic Pathology and of the Radiologic Pathologic Correlation Course is to present a balanced curriculum based on a broad selection of material. In view of this, we encourage residents to submit cases of breast pathology, **despite the lack of a gross photograph**. This is because we realize that many specimens, especially of carcinoma, are not resectable in such a way that allows for optimal gross photography. Of course, we must still insist on high quality original films (mammograms, etc.) and pathologic material (glass slides, tissue blocks) of the proven specimen. The provision of a quality gross photograph of the resected specimen would greatly add to the teaching value of the cases. Cases using multiple imaging modalities are especially prized.

### **CHEST AND CARDIOVASCULAR:**

All chest and cardiovascular cases require histologic or culture proof to be accepted. Exception cases must be cleared by Dr. Galvin ([galvin@afip.osd.mil](mailto:galvin@afip.osd.mil)). Cases should be accompanied by chest radiographs whenever possible. CT cases should have both mediastinal and lung windows. Any well-correlated case will be accepted. However, the following subject areas are of interest:

- High resolution thin section CT of diffuse lung disease
  - Gross specimens would be helpful but are not critical. There must however, be an open lung or transbronchial biopsy. A combination of thick and thin sections is optimal. Coronal reconstruction to demonstrate the distribution is also helpful.
- Diffuse lung disease which has been treated with lung transplantation
  - These cases allow gross photography of the sectioned lung, if is properly prepared
  - Imaging from multiple point in time is important to illustrate the natural course of disease
- Tuberculosis
- Drug induced pulmonary disease
- Infectious pulmonary disease
- AIDS related thoracic disease
- Pulmonary manifestations of systemic disease
- Granulomatous pulmonary disease
- Airways Disease
- Inhalational Lung Disease

To best correlate pathologic material with the chest radiographic studies, please work with your pathologist before the pulmonary tissue is resected to arrange for inflated and fixed lung specimens. A variety of techniques are nicely detailed in Dr. E.R. Heitzman's book, The Lung, 2nd edition, ST. Louis: CV Mosby, 1984 (pgs 412). Macrosections as well as microsections of the inflated fixed tissue would significantly improve the radiologic/pathologic correlation. Inflated whole lung (or lobar/segmental) specimen radiographs of any pulmonary case would be greatly appreciated.

### **GASTROINTESTINAL:**

**No cases will be accepted without gross pathology unless previously cleared by Dr. Lewis (rachel.lewis@med.navy.mil).**

We are especially interested in the following cases:

- Congenital, neoplastic, and inflammatory disorders of the biliary tree with MR and MRCP
- Lymphoproliferative disorders associated with transplants
- AIDS-related lymphomas
- Inflammatory bowel disease
- CT angiography in staging of pancreatic malignancies
- Gastrointestinal manifestations of neurofibromatosis

We currently have numerous recent cases of appendicitis. Please do not bring cases of ordinary appendicitis. However, we are interested in unusual cases of appendicitis that are associated with tumors, parasites, or other uncommon entities.

## **GENTOURINARY:**

**No cases will be accepted without gross pathology unless previously cleared by Dr. Craig ([william.craig@afip.osd.mil](mailto:william.craig@afip.osd.mil)).**

We are especially interested in the following cases:

- MRI cases of any GYN tumors especially cervical and endometrial carcinoma
- Congenital uterine malformations with MRI
- Fetal anomalies especially with in-utero MRI. Photographs of the infant after delivery may be used as gross correlation
- AIDS related disorders of the urinary tract and kidneys
- Disorders of the ureters, bladder, and urethra, including trauma
- Inflammatory renal disease – acute and chronic
- Prostate and seminal vesicle disease

We currently have numerous cases of renal cell carcinoma. **Please do not bring cases of renal cell carcinoma** unless they are advanced stage disease (IVC invasion or distant metastases).

**We are no longer able to accept cases of placental pathology or gestational trophoblastic disease.**

## **MUSCULOSKELETAL:**

All cases should be accompanied by radiographs whenever possible. CT studies should have both bone and soft tissue windows. MR images should include some type of T1- and T2-weighted sequences. Sonography should include Doppler evaluation, if possible. All musculoskeletal cases must have histology and preferably gross material as well. If the lesion is only biopsied or curetted for treatment then histology alone is acceptable. However, if the lesion is resected both gross and histology must accompany the case. The best correlation with pathologic material is provided by working with your pathologist and sectioning specimens in similar planes to imaging.

- MR and CT correlated bone and soft tissue tumors (benign and malignant)
- Arthropathies
- Metabolic bone diseases
- Bone and soft tissue infections (with CT and MR correlation)
- Developmental / congenital abnormalities
- Bone dysplasias / dwarfs / syndromes
- Systemic diseases (Sarcoid, Gauchers, myelofibrosis, etc.)
- Traumatic abnormalities, particularly with arthroscopic and CT/MR correlation
- Nonaccidental trauma

If you bring a second case for the Musculoskeletal section the following criteria apply (in the order of preference):

1. Cases with histology and gross pathology
2. Cases with histology only
3. Cases with arthroscopic correlation
4. Pathognomonic cases.

If you have questions or concerns about the acceptability of your musculoskeletal case, contact Dr. Murphey at [murphey@afip.osd.mil](mailto:murphey@afip.osd.mil).

### **PEDIATRICS:**

We are particularly interested in the following cases:

- Genitourinary and hindgut congenital/developmental anomalies- *These will be accepted with surgical correlation if pathologic specimens are unavailable.*
- AIDS related disorders, all organ systems
- Umbilical abnormalities
- Perinatal brain abnormalities - congenital/acquired
- Congenital biliary disease

**We are no longer able to accept cases of fetal or neonatal autopsies.**

If you have questions or concerns about the acceptability of your pediatric case, contact Dr. Ellen Chung at [chung@afip.osd.mil](mailto:chung@afip.osd.mil).

**HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT  
(HIPAA) OF 1996**

All cases submitted after April 14, 2003 will comply with federal and contributing institution HIPAA requirements. We request that all cases be anonymous in accordance with your institutions HIPAA policy. Identifying patient information may be redacted from documentation and images.

The pathologic material submitted must contain a patient identification number that matches the number on the pathology/autopsy report. An internal identification system must be present at your institution to identify the patient in case of a change in diagnosis. If you have any questions regarding this requirement, refer to the AFIP Contributor's Manual (AFIP manual 40-4, <http://www.afip.org/consult/manual/index.html>).

The education and consultation material submitted to the AFIP is provided for in the business associate agreement between the Department of Defense and the Accreditation Council for Graduate Medical Education (ACGME). If you have any questions regarding the business associate agreement, please contact Mr. Donald Hatley ([hatleyd@afip.osd.mil](mailto:hatleyd@afip.osd.mil))

**COMPUTER SHEET**  
**INFORMATION FROM THE PATIENT'S PATHOLOGY REPORT**

STUDENT AFIP ID NUMBER \_\_\_\_\_

PATIENT'S AGE: \_\_\_\_\_ D.O.B. \_\_\_\_\_  
(At time of Specimen)

SEX: \_\_\_\_\_ RACE: \_\_\_\_\_  
(NOTE: If race is unknown, please state unknown)

SPECIMEN IDENTIFICATION NUMBER(S) \_\_\_\_\_  
(Specimen identification numbers must match the number on the pathology/autopsy report. An internal identification system must be present at your institution to identify the patient in case of a change in diagnosis.)

PATHOLOGIST'S NAME: \_\_\_\_\_

NAME AND ADDRESS OF HOSPITAL CONTRIBUTING THE PATHOLOGY\*  
Complete mailing address with zip code: \_\_\_\_\_

\_\_\_\_\_

Pathologist's phone number \_\_\_\_\_

Pathologist's fax number \_\_\_\_\_

IF ANY PATHOLOGY (BLOCKS OR TISSUE) IS TO BE RETURNED, LIST HERE  
(NOTE: If only microslides are submitted as pathology, these slides CANNOT be returned.):

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PLEASE INDICATE IF A LETTER OF THE AFIP'S INTERPRETATION IS  
DESIRED.

\_\_\_\_\_ No Letter Desired  
\_\_\_\_\_ Yes, Letter Desired

\*or films – if no pathologic material

**CASE ABSTRACT**

Resident's Name \_\_\_\_\_ AFIP Accession No. \_\_\_\_\_

Address \_\_\_\_\_

1. Contributing (Complete Hospital Address):

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2. Patient Information:

Age \_\_\_\_\_

Sex \_\_\_\_\_

Race \_\_\_\_\_

Category (Thoracic, GI, GU, MSK, Neuro, or Peds)

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3. Clinical Summary (History & Physical, Laboratory, Radiologic Findings, other Pertinent Data):

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4. Operative Findings & Description (Include Dates):

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**CASE ABSTRACT (continued)**

5. Pathology (Include Dates of Biopsy or Autopsy):

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6. Literature References:

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**CASE ABSTRACT (continued)**

7. Do you have plans to publish this case? Yes\_\_\_\_\_ No\_\_\_\_\_

Has this case been previously published? If so, please list the journal reference.

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**GROSS PATHOLOGY CAPTION**

(Describe or illustrate the gross pathologic findings, if n gross indicate No Gross below.)

Resident Name \_\_\_\_\_

## **FINAL CHECK LIST**

One case submission is required and must contain the following:

### **CASE MATERIAL**

1. Radiologic Images
2. Pathologic Material
3. Gross Images (35mm slides or digital images)

### **PAPERWORK (BRING ONE COPY OF ALL PAPERWORK)**

1. Computer Sheet
2. Case Abstract
3. Gross Pathology Caption Sheet
4. Pathology or Autopsy Report
5. Operative Report
6. Radiology Reports
7. Discharge or Clinical Summary