# M3 Surgical Pathology Introductory Experience Objectives in Detail

Understand specimen processing including accessioning, grossing, histology, immunohistochemistry, case sign-out and intraoperative section analysis and storage

Intraoperative consultation Submission of a specimen from the OR for immediate diagnosis

Intraoperative gross consult Analyzed grossly (ex: margin assessment)

<10 minutes, no tissue wasted, ~\$40

Intraoperative frozen consult Analyzed microscopically (ex: margin assessment, lymph node status)

~20 minutes, uses considerable tissue, ~\$200

Grossing Select tissue based upon what is needed to guide clinical management and to

assess items in synoptic reports/staging and national guidelines

"Tissue for disposal" Almost no tissue is for disposal, often *incorrect* OR documentation

Gross only Examine a specimen grossly without submission for microscopic examination

(ex: medical device, teeth, fat from liposuction)

Routine processing Submit tissue and create Hematoxylin& Eosin (purple/pink) slide to be examined

by light microscopy

Biopsy ~ 6 hours in histology processor

~ 24 hour *minimum* total for pathology report turnaround time

Resection ~9 to 13 hours in histology processor

~ 48 hour *minimum* total for pathology report turnaround time

Immunohistochemistry Use of antibody to a specific protein, visualized by light microscopy (most

commonly brown color)

Adds ~1-2 days to turnaround time

Specimen storage minimums Remnant tissue not submitted for histology: 2 weeks after case signed out

Paraffin tissue blocks: 10 years

Slides: 10 years

#### List information needed on the pathology requisition

Patient identifiers, relevant clinical history, prior cancer diagnoses, history of chemotherapy and/or radiation, surgical impression, surgical procedure

# Describe how to submit a surgical pathology specimen for routine processing, intraoperative consultation and lymphoma work-up

Routine processing Small bx should be sent in formalin

Large specimens may be sent dry

Intraoperative consult Small bx should be sent dry/on saline moistened Telfa pads (NOT in saline)

Large specimens should be sent dry

Lymphoma work-up Should be sent in saline, RPMI or dry (NOT in formalin)

## **Explain limitations of surgical pathology**

Tissue sampling, specimen mix-up, tissue artifact, unclassifiable tumors

### **Participation**

Specimen grossing Observe/assist sectioning of gross specimen

Intraoperative consultation Observe/practice grossing and cryo-sectioning of intraoperative consult

Histologic slide preparation Observe/practice sectioning paraffin embedded tissue