

AP Content Specifications

Fundamental Knowledge

1. Diagnosis of most common organ specific malignant tumors, according to NCI statistics (using variety of tissue/cytology specimens, such as needle biopsy, brushing, fine needle aspiration), and benign mimics
 - a. Bladder
Benign mimics of urinary bladder malignancy
Nephrogenic adenoma, inflammatory myofibroblastic tumor, inverted papilloma, von Brunn's nests, radiation atypia, florid cystitis glandularis, polypoid cystitis
 - b. Breast
Benign mimics
Sclerosing adenosis, intraductal papilloma, radial scar, nipple adenoma, mucocele-like lesion
 - c. Endometrial
Benign mimics: Endometrial hyperplasia, endometrial metaplasia (squamous/morular, mucinous, papillary syncytial)
 - d. GI
Benign mimics, pre-malignant lesions: Barrett's esophagus and Barrett's dysplasia, IBD with dysplasia, endometriosis, malakoplakia
 - e. Kidney
 - f. Leukemia: myeloid, lymphoid
Myelodysplasia
 - g. Lung and Pleura
Carcinoma v Mesothelioma
 - h. Lymphoma
Benign mimics of lymphoma
Kikuchi's lymphadenitis, follicular hyperplasia, progressive transformation of germinal centers, infectious mononucleosis,
 - i. Melanoma
Benign mimics: Spitz nevus, recurrent nevus, dysplastic nevus, halo nevus
 - j. Pancreas
 - k. Prostate
Benign mimics :Adenosis, atrophy, Cowper's glands, nephrogenic adenoma, radiation, basal cell hyperplasia
 - l. Skin (non-melanoma)
 - m. Thyroid
 - n. Other
 - 1) Hepatobiliary
Benign mimics of hepatocellular carcinoma: focal nodular hyperplasia, hepatocellular adenoma, macroregenerative nodules
 - 2) Ovary
Primary versus metastatic ovarian lesions

- o. Oral/ Maxillofacial, and major salivary glands
 - p. Thymus
 - q. Adrenal
2. Biopsy interpretation
 - a. Cervical/endometrial/vulvar biopsy interpretation
 - b. Core needle biopsy of breast
 - c. Core needle biopsy of prostate
 - d. Core needle biopsy of soft tissue
 - e. GI neoplastic and medical disease
 - f. Liver needle biopsy
 - h. Lung biopsy (Transbronchial and percutaneous)
 - i. Pleural/peritoneal biopsy
 3. Cytology
 - a. Cervical
 - b. Body fluids
 - c. Thyroid FNA
 4. Billing, coding, CLIA regulations
 5. Reporting/Handling of major resection specimens
 6. Application of FISH (RT-PCR) to tumor diagnosis and prognosis
 7. Application of immunohistochemistry in anatomic pathology
 - a. Understanding of causes of false + and – immunostains
 8. Handling of infectious cases

References:

1. Ordonez NG. What are the current best immunohistochemical markers for the diagnosis of epithelioid mesothelioma? A review and update. *Hum Pathol.* 2007; 38(1):1-16.
2. Young RH. From Krukenberg to today: the ever present problems posed by metastatic tumors in the ovary. Part II. *Adv Anat Pathol.* 2007 May;14(3):149-77.
3. Silverberg SG. The Endometrium: Pathologic principles and pitfalls. *Arch Pathol Lab Med* 2007;131:372-382
4. Gal, AA: Use and abuse of lung biopsy. *Adv Anat Pathol* 12:195-202, 2006