

**Literature Update - Surgical Pathology**  
**(Snippets in Surgical Pathology)**  
**July 2009**

**Human Pathology, Vol. 40, No. 7, July 2009**

- **Page 909:** A nice review on GvHD (GIT) with an overview of both histopathology and recommendations for reporting.
- **Page 942:** An interesting HPV profile of cervical HSILs from Belize City. HPV16 comprised less than 50%, whilst HPV18 was absent! HPV35 and 58 comprised about 20% each and HPV31 about 15%. Important stats for HPV vaccine efficacy in developing countries, given that only HPV16/18 (HR) is covered by the vaccine.
- **Page 957:** Another study comparing the value of p16, MIB-1 (Ki-67) and ProExC in cervical SILs. p16 proved to be most sensitive and specific, whilst two concordant results (using all three markers) improved the diagnostic accuracy. Beware of the p16 aberrant patterns with LSIL: about 50% are negative and about 10% are strongly positive. Hence, p16 is not useful to distinguish between low and high SILs.

**Journal of Pathology, Vol. 218, No. 3, July 2009**

- **Page 301:** Micropapillary carcinoma (MPC) of the breast (utilizing a combination of genomic and IHC) is a distinct aggressive subset (ER+) of invasive ductal carcinoma (IDC). Although often demonstrating a mixed phenotype of MPC and IDC, it is more closely related to pure MPC than pure IDC.

**Modern Pathology, Vol. 22, No. 7, July 2009**

- **Page 887:** Good old morphological clinico-pathological correlation: psammoma bodies in papillary thyroid carcinoma correlate with lymph node metastases and stage (poorer disease-free survival).

**Archives of Pathology & Laboratory Medicine, Vol. 133, No. 7, July 2009**

Another useful series of updates on surgical pathology, this time from the University of Chicago. Some highlights include:

- INI-1 negative in medullary renal tumors (page 1026, renal tumors).
- A useful review of pathologic evaluation of GYN specimens in selected genetic diseases (page 1041).
- The chemotherapeutic effects on GBM (page 1062).
- FNH of the liver renamed as telangiectatic adenoma (page 1078).
- Pleomorphic LCIS of the breast reviewed (page 1116).
- A useful paper on practical points for frozen sections in surgical pathology (page 1135), which I personally recommend.

**International Journal of Gynecological Pathology, Vol. 28, No. 4, July 2009**

- **Page 301:** TTF-1 (a useful marker of thyroid and lung adenocarcinomas) is not useful for pulmonary neuroendocrine tumors (since extrapulmonary N/E tumors may also demonstrate immunoreactivity). This study demonstrates TTF-1 immunoreactivity in normal GYN tract tissue. Note that recent publications have demonstrated 15-30% immunoreactivity in GYN adenocarcinomas.
- **Page 308:** Intraepithelial serous carcinoma (ISC) of the endometrium may co-exist with tubal intraepithelial carcinoma (TIC) in about 50% of cases. Hence, the SEE-FIM grossing of fallopian tubes is recommended in all patients with ISC.

- **Page 334:** Stromal cellular atypia has been observed in the oral, bladder, cervical, vulva and GIT mucosae. This study illustrates similar atypia in endometrial stroma.
- **Page 356:** A unique feature of ovarian fibroma is the heavy deposition of hyaline globules, hence the need to rule out Krukenberg and YST which could pose potential diagnostic pitfalls.
- **Page 389:** Glassy cell carcinoma of the cervix is thought to originate from reserve or uncommitted cells and represents a variant of adenosquamous carcinoma. This study proposes a predominant commitment to squamous lineage with 6/9 (66%) being HPV positive (predominant HPV18 and 32).

#### **Journal of Clinical Pathology, Vol. 62, No. 7, July 2009**

- **Page 597:** The enigmatic concept of intraductal carcinoma of the prostate (IDCP) (NOT to confuse with HGPIN or invasive ductal/endometrioid carcinoma). This review reaffirms IDCP as a distinct entity and provides precise Gleason reporting grades when identified. IDCP fills and expands ducts (as opposed to HGPIN), basal cells are intact with marked pleomorphism, cribriform/solid I comedonecrosis. The importance of recognizing IDCP in prostatectomy specimens is its association with aggressive cancers. When found in isolation on biopsy then a comment that unsampled aggressive disease may be present is essential to ensure a rebiopsy.
- **Page 617:** A 3-D reconstruction of SLN with metastatic breast cancer reveals three patterns of growth: sinusoidal, nodular and diffuse. The significance of these growth patterns awaits evaluation for prognosis/biological significance.
- **Page 629:** Recently tissue microassay (TMA) has been questioned with respect to IHC evaluation, given that only a small sample is represented. This study (using MPNST and S-100) shows good agreement between TMA and whole sections.

#### **Advances in Anatomic Pathology, Vol. 16, No. 4, July 2009**

- **Page 183:** A nice review of the radiology, clinical and pathological correlation of non-malignant lesions on core needle biopsy of the breast.
- **Page 196:** Many of our clinical oncology colleagues have requested EGFR IHC in colorectal cancers in order to execute EGFR inhibitor treatment, which has been shown to be effective in a subset of colon cancers. However, this therapy has been shown to be ineffective in tumors with mutations of codon 12/13 on exon 2 of the KRAS gene. Hence, the FDA now requires all potential candidates for anti-EGFR therapy to undergo/determine the KRAS mutation status prior to treatment.
- **Page 236:** Remember Castleman's disease (hyaline-vascular, plasma-cell and multicentric types). This paper reviews the clinical, pathological and pathogenesis of these subtypes. The hyaline vascular (unicentric, follicular dendritic cell abnormality with associated FDC tumors evolving in a subset), plasma cell (IL6 abnormality, POEMS associated), HHV8-associated (microlymphomas, plasmablastic lymphomas) and multicentric (plasma cell, IL6) types are reviewed.
- **Page 247:** Goblet cell carcinoid tumors of the appendix are now divided into three subgroups:
  - A: Typical GCC
  - B: Adenocarcinoma, ex GCC, signet ring type
  - C: Adenocarcinoma, ex GCC, poorly differentiated Ca

**American Journal of Surgical Pathology, Vol. 33, No. 7, July 2009**

- **Page 963:** SIRT (selective internal radiation therapy) comprising glass or resin microspheres labelled with Yttrium-90, has been introduced via hepatic vasculature for primary or metastatic hepatic tumors. It has a tissue penetrance of 2.4 mm and is introduced directly into the tumors with the reduced potential for adjacent/surrounding tissue damage. This paper demonstrates the microspheres in gastritis (3) and cholecystitis (as well as hepatic tumors). See Histopathol, V55, N1, July 2009.
- **Page 976:** Previously introduced as “ossifying stromal-epithelial tumors” (3) and “desmoplastic-nested spindle cell tumors” (6) of the liver, this present series (9) refers to this “new kid on the block” as calcifying nested stromal-epithelial tumors. Approximately 5-20 cm, the nests/islands of spindled/epithelioid cells are embedded in a cellular desmoplastic stroma with focal psammoma-like calcification. Focal cytokeratin, with a potential for recurrence, places these tumors in the low grade malignant category.
- **Page 1037:** The primary site of metastatic micropapillary carcinoma can easily be determined with uroplakin (bladder), TTF-1 (lung), mammoglobin (breast) and WT1 (ovary).
- **Page 1058:** Another new member of the IgG4 lymphoplasmacytic sclerosing disease: IgG4 sclerosing mastitis presents with a painless mass and comprises 50-85% IgG-4 plasma cells. As with other organs, outcome is favorable.
- **Page 1085:** Epithelioid cell myofibroblastoma adds to the expanding morphological spectrum of this enigmatic breast tumor: cellular, fibrous, lipomatous, infiltrative and myxoid. The epithelioid variant reflects the same IHC immunoprofile: CD34, desmin,  $\alpha$ -SMA and ER/PR positive, and presents with a variety of patterns: alveolar, single file/cell, solid, fascicular.

**American Journal of Clinical Pathology, Vol. 132, No. 1, July 2009**

- **Page 86:** The role of frozen section is addressed in this study with the importance of recognition of fungal hyphae (acute fungal sinusitis) in necrotic debris, viz mucor/aspergillus. These sections should also be reviewed for vascular and perineurial invasion.
- **Page 94:** A subset of well-defined criteria in high grade dysplasia in Barrett esophagus is predictive of associated carcinoma:
  - cribriform/solid pattern
  - dilated tubules/necrotic debris
  - ulcerated HGD
  - neutrophils in dysplasia
  - invasion into squamous epithelium.When one of these criteria is present in the esophageal biopsy, then carcinoma was present in about 40% of the resected specimen. When two (~80%), three (~85%) and four (~90%) criteria were present, the incidence of carcinoma increased exponentially.

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