

## GIPS JOURNAL WATCH, SEP/OCT 2012

### **GASTROENTEROLOGY, Oct 2012**

*Second Cancers and Residual Disease in Patients Treated for Gastric Mucosa-Associated Lymphoid Tissue Lymphoma by Helicobacter pylori Eradication and Followed for 10 Years.*

Wündisch T, et al. *Gastroenterology*. 2012 Oct;143(4):936-42.

This study examines the long-term outcome in patients with gastric MALT-lymphoma after eradication of *Helicobacter* organisms. Majority of patients achieved complete remission and did not have recurrence, but are at risk for second malignancies such as gastric cancer and diffuse large B-cell lymphoma. Patients with macroscopic remission but histologic residual disease tend to have a favorable outcome; a 'wait and watch' approach is advocated for these cases.

Translocation t(11;18) is associated with an adverse outcome.

<http://www.ncbi.nlm.nih.gov/pubmed/22750463>

*Guidelines for colonoscopy surveillance after screening and polypectomy: a consensus update by the US Multi-Society Task Force on Colorectal Cancer.*

Lieberman DA, et al. *Gastroenterology*. 2012;143(3):844-57.

These are updated recommendations for surveillance after polypectomy and include guidelines for sessile serrated adenomas.

<http://www.ncbi.nlm.nih.gov/pubmed/22763141>

### **GASTROENTEROLOGY, Sep 2012**

*Development of subsquamous high-grade dysplasia and adenocarcinoma after successful radiofrequency ablation of Barrett's esophagus.*

Titi M, et al. *Gastroenterology*. 2012 Sep;143(3):564-6.

This report includes 3 cases in which subsquamous high grade dysplasia or adenocarcinoma developed in Barrett's esophagus after ablation therapy. The need for continued surveillance and careful use of ablation therapy is emphasized.

<http://www.ncbi.nlm.nih.gov/pubmed/22561053>

### **AMER J GASTROENTEROL, Oct 2012**

*Persistent duodenal intraepithelial lymphocytosis despite a long-term strict gluten-free diet in celiac disease.*

Tuire I, et al. *Am J Gastroenterol*. 2012 Oct;107(10):1563-9.

The study shows that the increase in IELs persist in more than half of celiac disease patients despite gluten-free diet. The study suggests that consumption of oats correlates with this finding. Despite intraepithelial lymphocytosis, these patients have a favorable outcome.

<http://www.ncbi.nlm.nih.gov/pubmed/22825364>

### **AMER J GASTROENTEROL, Sep 2012**

*Serrated lesions of the colorectum: review and recommendations from an expert panel.*

Rex DK, et al. *Am J Gastroenterol*. 2012 Sep;107(9):1315-29.

This is an excellent and exhaustive review of serrated colorectal polyps with guidelines for diagnosis and endoscopic surveillance. A couple of highlights: (1) single crypt with unequivocal architectural distortion, dilatation, with or without horizontally branched crypt is enough for diagnosis of sessile serrated adenoma, (2) recommended surveillance interval for sessile serrated adenoma or traditional serrated adenoma is 5 years for polyps <1 cm and 3 years for polyps  $\geq$ 1 cm.

<http://www.ncbi.nlm.nih.gov/pubmed/22710576>

### **HUMAN PATHOLOGY, Oct 2012**

*Unusual DNA mismatch repair-deficient tumors in Lynch syndrome: a report of new cases and review of the literature.*

Karamurzin Y, et al. *Hum Pathol.* 2012 Oct;43(10):1677-87.

This report adds to the tumors that can be observed in Lynch syndrome including peritoneal mesothelioma, pancreatic acinar cell carcinoma, pancreatic neuroendocrine tumor and adrenocortical carcinoma.

<http://www.ncbi.nlm.nih.gov/pubmed/22516243>

*The novel monoclonal antibody HPC2 and N-cadherin distinguish pancreatic ductal adenocarcinoma from cholangiocarcinoma.*

Hooper JE, et al. *Hum Pathol.* 2012 Oct;43(10):1583-9.

The study highlights the utility of immunohistochemistry for N-cadherin and human pancreatic cancer fusion #2 (HPC2) for distinguishing pancreatic ductal adenocarcinoma from intrahepatic cholangiocarcinoma. Pancreatic ductal adenocarcinomas are usually N-cadherin-negative and HPC2-positive, while most cholangiocarcinomas show the opposite pattern of staining.

<http://www.ncbi.nlm.nih.gov/pubmed/22406361>

### **AJSP, October 2012**

*Commercial Molecular Panels Are of Limited Utility in the Classification of Pancreatic Cystic Lesions*

Panarelli NC et al. *Am J Surg Pathol.* 2012;36(10):1434-1443.

The utility of the PathfinderTG panel is studied in the context of FNA biopsies from small pancreatic cystic lesions. Twenty cases of pancreatic cystic lesions were classified by cytology as pseudocyst, serous cystadenoma, or mucinous neoplasm with varying grades of dysplasia. The PathfinderTG panel was used separately to classify cases as nonmucinous (reactive/indolent or serous) or mucinous (low-risk or at risk) cyst. Only 7 cases (35%) were concordant by commercial versus cytologic classification. The authors conclude that this commercial panel should not replace cytologic evaluation of such lesions.

*Sclerosing Cholangitis With Granulocytic Epithelial Lesion: A Benign Form of Sclerosing Cholangiopathy*

Zen Y et al. *Am J Surg Pathol.* 2012;36(10):1555-1561.

103 pediatric liver biopsies with autoimmune sclerosing cholangitis and 142 adult liver biopsies with PSC were reviewed for neutrophilic bile duct injury similar to granulocyte epithelial injury (GEL) in the setting of type 2 autoimmune pancreatitis. Five total cases (4 pediatric, 1 adult)

were studied further; these patients responded extremely well to drug therapy with normal liver studies over several years, indicating the importance of identifying this rare, therapy-responsive subtype of sclerosing cholangitis.

### **AJSP, September 2012**

*Intracholecystic Papillary-Tubular Neoplasms (ICPN) of the Gallbladder (Neoplastic Polyps, Adenomas, and Papillary Neoplasms That Are  $\geq 1.0$  cm): Clinicopathologic and Immunohistochemical Analysis of 123 Cases*

Adsay V et al. *Am J Surg Pathol.* 2012;36(9):1279-1301.

The diverse cell lineage and variable clinical behavior of large gallbladder tumoral preinvasive neoplasms (at least 1 cm) is discussed based on 123 cases analyzed.

*Neutrophilic Infiltration in Gluten-sensitive Enteropathy Is Neither Uncommon Nor Insignificant: Assessment of Duodenal Biopsies From 267 Pediatric and Adult Patients*  
Moran CJ et al. *Am J Surg Pathol.* 2012;36(9):1339-1345.

116 adult and 151 pediatric causes of GSE were studied with a focus on degree of neutrophilic inflammation, which traditionally has invoked alternate diagnoses. In this study, the presence of neutrophils was common particularly in children and was associated with increased disease severity. Additionally, neutrophilic activity score and disease activity score correlated positively with the presence of lymphocytic gastritis.

### **HISTOPATHOLOGY, Oct 2012**

*Techniques to increase lymph node harvest from gastrointestinal cancer specimens: a systematic review and meta-analysis*

Abbasi-Ghadi N et al. *Histopathol.* 2012;61):531-542.

This review article addresses techniques to improve lymph node yield from resection specimens for GI cancer, including fat clearing and methylene blue staining.

*Diagnostic reproducibility of tumour budding in colorectal cancer: a multicentre, multinational study using virtual microscopy*

Puppa G et al. *Histopathol.* 2012;61:562-575.

Twelve investigators across multiple institutions examined digitized whole-slide images for colorectal cancer budding (bud defined as a single cancer cell or a group of fewer than five detached tumor cells). Overall diagnostic agreement was fair; significantly higher agreement was reached in early cancer and among experienced GI pathologists. Cytokeratin immunostaining did not improve interobserver agreement though it aided in detection of tumor buds.

### **HISTOPATHOLOGY, Sep 2012**

*Stage II colonic adenocarcinoma: a detailed study of pT4N0 with emphasis on peritoneal involvement and the role of tumour budding*

Canney AL et al. *Histopathol.* 2012;61:488-496.

Colon cancers staged as pT4N0 are classified as (i) at the peritoneal surface or free in the peritoneal cavity (n=44), (ii) directly invading adjacent organ(s) (n=8), or (iii) showing inflammatory involvement of the peritoneum (n=25). A pT3N0 cohort is used for comparison of Stage II subgroups. No significant survival difference is found across the three subgroups. Neural invasion is found to be an independent predictor of poor outcome; tumor budding does not predict outcome.

### **ARCH PATHOL LAB MED, Oct 2012**

*The Lower Anogenital Squamous Terminology Standardization Project for HPV-Associated Lesions: Background and Consensus Recommendations from the College of American Pathologists and the American Society for Colposcopy and Cervical Pathology*  
Darragh TM et al. *Arch Pathol Lab Med.* 2012;136:1266-1297.

The authors provide an update and review of terminology for HPV-associated squamous lesions of the lower anogenital tract.

### **MODERN PATHOLOGY, Sep/Oct 2012**

*Tumor budding in colorectal carcinoma: time to take notice*  
Bojana Mitrovic, et al. *Mod Pathol* 25: 1315-1325.

In this review the morphologic features and prognostic significance of tumor budding is discussed. The article points to several sources of evidence that tumor budding is an independent adverse prognostic indicator when it is "high grade" but that there is no agreed upon definition on the cutoffs for "high grade" tumor budding. The authors describe their institution's approach to reporting tumor budding based on the most widely used criteria in the literature of greater than 10 groups of less than 5 cells in a 20 x objective field.

<http://www.ncbi.nlm.nih.gov/pubmed/22790014>

*Parameters predicting lymph node metastasis in patients with superficial esophageal squamous cell carcinoma*

Liyun Xue, et al. *Mod Pathol* 25: 1364-1377.

In this retrospective study 271 esophagectomy cases with superficial squamous cell carcinoma were reviewed and the relationships between clinicopathologic parameters and immunohistochemistry markers on tissue microarray (p53, cyclin D1, EGFR, and VEGF) with the presence of lymph node metastasis were evaluated. Based on these findings the authors make some recommendations on when endoscopic resection may be adequate treatment for superficial squamous cell carcinoma.

<http://www.ncbi.nlm.nih.gov/pubmed/22627741>

*The clinical significance of lymph node size in colon cancer*

Bruno Märkl, et al. *Mod Pathol* 25: 1413-1422.

This study, involving 237 colon cancer cases using enhanced lymph node retrieval (methylene blue and fat clearance), looked at the clinical significance of lymph node size with respect to the presence of metastatic tumor and prognosis. The authors found that only 25% of the lymph nodes larger than 10 mm were involved with metastatic tumor and that in 67% of the cases the largest positive lymph node was less than 10 mm, drawing into question the size criteria used by

radiologists for identifying metastatic disease. The authors also found that small lymph nodes (less than 1 mm) rarely contained metastatic tumor and argue against including these in the pathology report's lymph node count.

<http://www.ncbi.nlm.nih.gov/pubmed/22684222>

*Proximal colon cancers and the serrated pathway: a systematic analysis of precursor histology and BRAF mutation status*

Deepa T Patil, et al. *Mod Pathol* 25: 1423-1431.

In this study a cohort of 75 non-Lynch related, proximal, microsatellite instability - high (MSI-H) tumors was compared with a cohort of 89 proximal microsatellite stable (MSS) tumors with respect to precursor lesions for each. 25% of the MSI-H tumors and 35% of the MSS tumors were associated with precursor lesions. While some of the precursors of MSI-H tumors were sessile serrated adenomas others were more readily classified as conventional adenomas; however, molecular analysis for BRAF mutation found that most of these conventional adenoma harbored BRAF mutations, a marker for the serrated neoplasia pathway, raising the possibility that they may represent sessile serrated adenomas with complete cytologic dysplasia. Only one of the 31 precursor lesions found with MSS colon cancers was a sessile serrated adenoma.

<http://www.ncbi.nlm.nih.gov/pubmed/22684223>

### **Gastroenterology Clinics of North America, Sep 2012**

*Colorectal normal histology and histopathologic findings in patients with chronic diarrhea.*

Langner C. *Gastroenterol Clin North Am.* 2012 Sep;41(3):561-80.

This basic review discusses the clinical and pathologic features of microscopic (lymphocytic and collagenous) colitis, inflammatory bowel disease (Crohn's disease and ulcerative colitis), as well as the emerging concept of mast cell colitis.

<http://www.ncbi.nlm.nih.gov/pubmed/22917164>

**Raga Ramachandran, MD, PhD**  
**University of California, San Francisco**

**Steven D Hart, MD**  
**University of California, Los Angeles**

**Sanjay Kakar, MD**  
**University of California, San Francisco**