GIPS JOURNAL WATCH, JULY-AUG 2012

Gastroenterology, Jul/Aug 2012

Association Between Recurrent Metastasis From Stage II and III Primary Colorectal Tumors and Moderate Microsatellite Instability. Garcia M, et al. Gastroenterology. 2012;143(1):48-50.

While the clinical significance of MSI-high colorectal adenocarcinoma is well known, the role of MSI-low and elevated microsatellite alterations at selected tetranucleotide repeats (EMAST) is uncertain. This study shows that these molecular changes predict adverse outcome in colorectal cancer.

http://www.ncbi.nlm.nih.gov/pubmed/22465427

Lymphoma in inflammatory bowel disease and treatment decisions. Bewtra M. Am J Gastroenterol. 2012;107(7):964-70.

A review of the risk of lymphoma in IBD with different immunomodulatory therapies. http://www.ncbi.nlm.nih.gov/pubmed/22764018

Loss of interleukin-10 signaling and infantile inflammatory bowel disease: implications for diagnosis and therapy. Kotlarz D, et al. Gastroenterology. 2012;143(2):347-55.

IBD can occur in infants and shows diffuse colonic inflammation that does not respond well to therapy. Mutations in IL-10 and IL-10 receptor have been implicated. This study demonstrates these mutations in 16 out of 66 children with IBD diagnosed before 5 years of age. All patients with these mutations developed clinical disease before 3 months and had perianal involvement. Folliculitis and arthritis was often present in patients with IL-10 receptor mutations. Allogeneic hematopoietic stem cell transplantation can induce remission in these patients. http://www.ncbi.nlm.nih.gov/pubmed/22549091

Consensus Statements for Management of Barrett's Dysplasia and Early-Stage Esophageal Adenocarcinoma, Based on a Delphi Process. Bennett C, et al. Gastroenterology. 2012;143(2):336-46.

Consensus statements about management of dysplasia and adenocarcinoma such as endoscopic therapy is preferred over surveillance and surgery in high grade dysplasia. Valuable pathologic points are discussed.

http://www.ncbi.nlm.nih.gov/pubmed/22537613

Am J Gastroenterology, July 2012

How Much Do PPIs Contribute to C. difficile Infections? Leontiadis GI, et al. Am J Gastroenterol. 2012 Jul;107(7):1020-1. Two meta-analysis studies show a significant association of PPI use with *C. difficile* diarrhea. This editorial summarizes the study and weighs the evidence. <u>http://www.ncbi.nlm.nih.gov/pubmed/22764024</u>

Gut, Aug 2012

Lymphocytic oesophagitis: clinicopathological aspects of an emerging condition Haque S, Genta RM. Gut 2012;61:1108-1114

Lymphocytic esophagitis (LyE) first was described by Rubio et al. in 2006. Here, a group of GI pathologists identify 119 patients with LyE (median age 63 years, 40% men). These patients are found to present with dysphagia, odynopahagia and motility disorders as commonly as patients with eosinophilic esophagitis. Only 20% of these patients present with GERD. While in children, esophageal lymphocytic infiltrates are associated with Crohn disease in a significant percentage of children, in the adult population, there is no association with Crohn disease. http://gut.bmj.com/content/61/8/1108.abstract

Human Pathology, July 2012

Developments in the assessment of venous invasion in colorectal cancer: implications for future practice and patient outcome. Messenger DE, et al. Hum Pathol. 2012;43(7):965-73.

A review article emphaizing the importance of identifying venous invasion in colorectal cancer resection specimens, a feature that has been shown to be an independent predictor of visceral metastasis. The literature is comprehensively reviewed and the illustrations are excellent. Recommendations include at least 4 tumor blocks, correlation with MRI findings (in rectal cancer) and elastic stain (at least in suspicious cases). http://www.ncbi.nlm.nih.gov/pubmed/22406362

AJSP, Jul/Aug 2012

<u>Serrated Polyposis Is an Underdiagnosed and Unclear Syndrome: The Surgical Pathologist has a</u> <u>Role in Improving Detection</u> Crowder CD et al. Am J Surg Pathol. 2012;36(8):1178-1185.

929 patients with at least 1 serrated polyp were identified, of whom 17 (1.8%) met WHO criteria for serrated polyposis syndrome (SPS). Cutoffs for number and size of lesion at index procedure are proposed to alleviate underdiagnosis of SPS.

<u>Distinct Clinicohistologic Features of Inflammatory Bowel Disease-associated Colorectal</u> <u>Adenocarcinoma: In Comparison With Sporadic Microsatellite-stable and Lynch Syndrome-related</u> <u>Colorectal Adenocarcinoma</u>

Liu X et al. Am J Surg Pathol. 2012;36(8):1228-1233.

Histology of IBD-associated colorectal cancer is examined in 95 cases of UC and 13 cases of Crohn and these cases are compared to Lynch syndrome-related cancers.

<u>Gastric Adenocarcinoma With Chief Cell Differentiation: A Proposal for Reclassification as Oxyntic</u> <u>Gland Polyp/Adenoma</u> Singhi AD et al. Am J Surg Pathol. 2012;36(7):1030-1035.

10 cases of this rare variant of gastric adenocarcinoma are described. Of the 9 patients for whom follow-up was available, only 1 had persistent lesion at 6 months due to incomplete removal. The lesions are best characterized as benign and therefore a change in nomenclature is suggested until further studies of these lesions can be performed.

Whipple <u>Disease a Century After the Initial Description: Increased Recognition of Unusual</u> <u>Presentations, Autoimmune Comorbidities, and Therapy Effects</u> Arnold CA et al. Am J Surg Pathol. 2012;36(7):1066-1073.

The Whipple immunohistochemical stain is described and 23 biopsy specimens are reviewed with emphasis on unusual clinicopathologic presentations.

Histopathology, Jul/Aug 2012

<u>Discovered on gastrointestinal stromal tumours 1 (DOG1) expression in non-gastrointestinal</u> <u>stromal tumour (GIST) neoplasms (pages 170–177)</u> Hemminger J, Iwenofu OH. Histopathol. 2012;61(2):170-177.

This study supports the role of DOG-1 as a sensitive and specific marker of GIST. In addition, expression pattern in several non-GIST tumors is presented, including melanoma, schwannoma, neurofibroma, and others.

<u>Submucosal glands in the columnar-lined oesophagus: evidence of an association with metaplasia</u> <u>and neosquamous epithelium</u> Lorinc E, Oberg S. Histopathol. 2012;61(1):53-58.

Seven esophageal resection specimens for adenocarcinoma were submitted entirely for histology and the columnar-lined esophagus was analyzed. The distribution of submucosal glands and excretory ducts shows relative accumulation beneath squamous islands and at the squamocolumnar junction within the metaplastic segment. The possibility is discussed that the SMG houses a progenitor cell for metaplastic columnar and neosquamous epithelium.

Arch Pathol Lab Med, Jul/Aug 2012

The Differential Diagnosis of Colitis in Endoscopic Biopsy Specimens: A Review Article Cerilli LA, Greenson JK. Arch Pathol Lab Med. 2012;136(8):854-864. The authors provide a thorough review of colitis on biopsy. <u>Abstract</u> An Update on Celiac Disease Histopathology and the Road Ahead Bao F et al. Arch Pathol Lab Med. 2012;136(7):735-745. A thorough review of celiac disease biopsy and clinical testing. <u>Abstract</u>

Reevaluation and Identification of the Best Immunohistochemical Panel (pVHL, Maspin, S100P, IMP-3) for Ductal Adenocarcinoma of the Pancreas

Liu H et al. Arch Pathol Lab Med. 2012;136(6):601-609.

This 4-stain panel approach is suggested as the best panel to distinguish pancreatic ductal adenocarcinoma from non-neoplastic pancreas in needle biopsies and FNA specimens. <u>http://www.ncbi.nlm.nih.gov/pubmed/22646265</u>

Am J Clinical Pathology, July/Aug 2012

Gastrointestinal Pathology in Celiac Disease: A Case Series of 150 Consecutive Newly Diagnosed Patients Brown IS, et al. Am J Clin Pathol. 2012 Jul;138(1):42-9.

Histologic changes of celiac disease are reviewed with an emphasis on under recognized features such as neutrophilic infiltrate, a mild to moderate eosinophilic infiltrate, enterocyte abnormalities, subepithelial collagen thickening, and associated lymphocytic colitis. <u>http://www.ncbi.nlm.nih.gov/pubmed/22706856</u>

The Significance of Duodenal Mucosal Atrophy in Patients With Common Variable Immunodeficiency: A Clinical and Histopathologic Study Biagi F, et al.

Based on 26 CVID cases, the study shows that none of the histologic features evaluated (absence of plasma cells, polymorphonuclear cell infiltrate, graft-versus host disease like lesion) were helpful in distinguishing patients with CVID and celiac disease and that response to a gluten free diet was the only specific feature to identify celiac disease in CVIS patients.

Modern Pathology, Aug 2012

Gene discovery in familial cancer syndromes by exome sequencing: prospects for the elucidation of familial colorectal cancer type X Ku C, et al. Mod Pathol. 2012;25(8):1055-68.

The review examines the current state of knowledge about "familial colorectal cancer type X," a familial colorectal cancer syndrome in which all the Amsterdam criteria are met, but the characteristic features of Lynch syndrome including microsatellite instability and DNA mismatch repair gene mutations are absent. Little is known about the underlying genetic cause of the syndrome and the use of recent advances in technology in genotyping and sequencing of these cases is discussed.

http://www.ncbi.nlm.nih.gov/pubmed/22522846

Clinicopathologic and molecular features of sporadic early-onset colorectal adenocarcinoma: an adenocarcinoma with frequent signet ring cell differentiation, rectal and sigmoid involvement, and adverse morphologic features.

Chang D, et al. Mod Pathol. 2012;25(8):1128-39.

Compared to older patients, early onset colorectal cancer (before age 40 years) has a predilection for the distal colon/sigmoid/rectum, signet ring cell differentiation, venous invasion, and perineural invasion. Both groups had similar stage and overall survival. There was no overrepresentation of inflammatory bowel diseases or familial cases like Lynch syndrome in the early onset cases.

http://www.ncbi.nlm.nih.gov/pubmed/22481281

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