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- 1282 Epidemiology, Pathophysiology, and Treatment of Diverticulitis**
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ORIGINAL RESEARCH**Full Reports****Clinical—Alimentary Tract**

- 1299 An Interactive Web-Based Educational Tool Improves Detection and Delineation of Barrett's Esophagus-Related Neoplasia**
WWW J. J. G. H. M. Bergman, A. J. de Groof, O. Pech, K. Ragunath, D. Armstrong, N. Mostafavi, L. Lundell, J. Dent, M. Vieth, G. N. Tytgat, and P. Sharma, on behalf of the International Working Group for Classification of Oesophagitis

A web-based training module significantly improves endoscopists' recognition of Barrett Esophagus Related Neoplasia, improving endoscopic recognition of the subtle abnormalities of early esophageal cancer associated with Barrett's esophagus.

1309 New and Recurrent Colorectal Cancers After Resection: a Systematic Review and Meta-analysis of Endoscopic Surveillance Studies

L. Fuccio, D. Rex, T. Ponchon, L. Frazzoni, M. Dinis-Ribeiro, P. Bhandari, E. Dekker, M. Pellisè, L. Correale, J. van Hooft, R. Jover, D. Libanio, F. Radaelli, S. Alfieri, F. Bazzoli, C. Senore, J. Regula, T. Seufferlein, T. Rösch, P. Sharma, A. Repici, and C. Hassan

After surgery for colorectal cancer, the highest risk of cancer at anastomotic and non-anastomotic location was restricted to the early follow up period, with a significant decrease in incidence at 24-36 months from surgery.

1324 Fecal Microbiota Transplantation Is Superior to Fidaxomicin for Treatment of Recurrent Clostridium difficile Infection

C. L. Hvas, S. M. Dahl Jørgensen, S. P. Jørgensen, M. Storgaard, L. Lemming, M. M. Hansen, C. Erikstrup, and J. F. Dahlerup

In this randomized clinical trial, fecal microbiota transplantation (FMT) was superior to fidaxomicin in inducing resolution of recurrent *Clostridium difficile* infection. The effect was observed in several groups of patients.

1333 No Association Between Pseudopolyps and Colorectal Neoplasia in Patients With Inflammatory Bowel Diseases

R. Mahmoud, S. C. Shah, J. R. ten Hove, J. Torres, E. Mooiweer, D. Castaneda, J. Glass, J. Elman, A. Kumar, J. Axelrad, T. Ullman, J.-F. Colombel, B. Oldenburg, and S. H. Itzkowitz, for the Dutch Initiative on Crohn and Colitis

Guidelines recommend more frequent surveillance colonoscopies in patients with inflammatory bowel diseases and pseudopolyps. In this retrospective analysis of two large independent surveillance cohorts, pseudopolyps did not predict colorectal neoplasia.

1345 Past and Future Burden of Inflammatory Bowel Diseases Based on Modeling of Population-Based Data

S. Coward, F. Clement, E. I. Benchimol, C. N. Bernstein, J. A. Avina-Zubieta, A. Bitton, M. W. Carroll, G. Hazlewood, K. Jacobson, S. Jelinski, R. Deardon, J. L. Jones, M. E. Kuenzig, D. Leddin, K. A. McBrien, S. K. Murthy, G. C. Nguyen, A. R. Otley, R. Panaccione, A. Rezaie, G. Rosenfeld, J. N. Peña-Sánchez, H. Singh, L. E. Targownik, and G. G. Kaplan

By 2030, approximately 1.0% of the Canadian population will be diagnosed with inflammatory bowel disease – significantly increasing from 0.7% in 2018.

1354 Treatment of Active Crohn's Disease With an Ordinary Food-based Diet That Replicates Exclusive Enteral Nutrition

V. Svolos, R. Hansen, B. Nichols, C. Quince, U. Z. Ijaz, R. T. Papadopoulou, C. A. Edwards, D. Watson, A. Alghamdi, A. Brejnrod, C. Ansalone, H. Duncan, L. Gervais, R. Tayler, J. Salmond, D. Bolognini, R. Klopfleisch, D. R. Gaya, S. Milling, R. K. Russell, and K. Gerasimidis

CD-TREAT is a new food-based diet which changes gut bacteria and improves disease markers in animals with gut inflammation and in children with Crohn's disease.

Clinical—Liver**1368 Epidemiology and Effects of Bacterial Infections in Patients With Cirrhosis Worldwide**

S. Piano, V. Singh, P. Caraceni, R. Maiwall, C. Alessandria, J. Fernandez, E. C. Soares, D. J. Kim, S. E. Kim, M. Marino, J. Vorobioff, R. d. C. R. Barea, M. Merli, L. Elkrief, V. Vargas, A. Krag, S. P. Singh, L. A. Lesmana, C. Toledo, S. Marciano, X. Verhelst, F. Wong, N. Intagliata, L. Rabinowich, L. Colombato, S. G. Kim, A. Gerbes, F. Durand, J. P. Roblero, K. R. Bhamidimarri, T. D. Boyer, M. Maevskaya, E. Fassio, H. S. Kim, J. S. Hwang, P. Gines, A. Gadano, S. K. Sarin, and P. Angeli, on behalf of the International Club of Ascites Global Study Group

Multi-drug resistant bacterial infections are responsible for one third of bacterial infections in cirrhotic patients with relevant regional differences and exert a negative impact on clinical outcomes.

1381 Factors Associated with Survival of Patients With Severe Acute-On-Chronic Liver Failure

E

**Before and After Liver Transplantation***V. Sundaram, R. Jalan, T. Wu, M. L. Volk, S. K. Asrani, A. S. Klein, and R. J. Wong***See editorial on page 1248.**

Waitlist mortality is highest among patients with ACLF-3 and a MELD score less than 25. Mechanical ventilation is associated with reduced patient survival after transplantation.

1392 Antiviral Activity, Safety, and Pharmacokinetics of Capsid Assembly Modulator NVR 3-778 in Patients with Chronic HBV Infection*M. F. Yuen, E. J. Gane, D. J. Kim, F. Weilert, H. L. Yuen Chan, J. Lalezari, S. G. Hwang, T. Nguyen, O. Flores, G. Hartman, S. Liaw, O. Lenz, T. N. Kakuda, W. Talloen, C. Schwabe, K. Klumpp, and N. Brown*

NVR 3-778 is a first-in-class hepatitis B virus capsid assembly modulator that has demonstrated proof-of-concept as an antiviral agent in patients with chronic hepatitis B.

Basic and Translational—Alimentary Tract**1404 Constitutively Higher Level of GSTT2 in Esophageal Tissues From African Americans Protects Cells Against DNA Damage***D. Ferrer-Torres, D. J. Nancarrow, H. Steinberg, Z. Wang, R. Kuick, K. M. Weh, R. E. Mills, D. Ray, P. Ray, J. Lin, A. C. Chang, R. M. Reddy, M. B. Orringer, M. I. Canto, N. J. Shaheen, L. A. Kresty, A. Chak, T. D. Wang, J. H. Rubenstein, and D. G. Beer*

Allelic variants of GSTT2 associated with higher protein expression may underlie the low incidence of EAC in AA by increasing expression of esophageal GSTT2 and protecting against DNA damage such as that caused by GERD.

1416 Individual and Combined Effects of Environmental Risk Factors for Esophageal Cancer Based on Results From the Golestan Cohort Study*M. Sheikh, H. Poustchi, A. Pourshams, A. Etemadi, F. Islami, M. Khoshnua, A. Gharavi, M. Hashemian, G. Roshandel, H. Khademi, M. Zahedi, B. Abedi-Ardekani, P. Boffetta, F. Kamangar, S. M. Dawsey, P. D. Pharaoh, C. C. Abnet, N. E. Day, P. Brennan, and R. Malekzadeh*

Ten years follow-up from the Golestan Cohort Study in North-East Iran revealed that about 75% of the high esophageal cancer incidence rates could be attributable to the combined effect of seven environmental exposures.

1428 Plasma Cells Are the Most Abundant Gluten Peptide MHC-expressing Cells in Inflamed Intestinal Tissues From Patients With Celiac Disease*L. S. Høydahl, L. Richter, R. Frick, O. Snir, K. S. Gunnarsen, O. J. B. Landsverk, R. Iversen, J. R. Jeliazkov, J. J. Gray, E. Bergseng, S. Foss, S.-W. Qiao, K. E. A. Lundin, J. JahnSEN, F. L. JahnSEN, I. Sandlie, L. M. Sollid, and G. Å. Løset*

Human gut plasma cells express MHCII and present gluten peptides in celiac patients. A potential role of plasma cells in antigen presentation has implications for our understanding of mucosal immunity.

1440 Specific Bacteria and Metabolites Associated With Response to Fecal Microbiota Transplantation in Patients With Ulcerative Colitis*S. Paramsothy, S. Nielsen, M. A. Kamm, N. P. Deshpande, J. J. Faith, J. C. Clemente, R. Paramsothy, A. J. Walsh, J. van den Bogaerde, D. Samuel, R. W. L. Leong, S. Connor, W. Ng, E. Lin, T. J. Borody, M. R. Wilkins, J.-F. Colombel, H. M. Mitchell, and N. O. Kaakoush*

Recent trials suggest fecal microbiota transplantation is an effective treatment in ulcerative colitis. Fecal and colonic samples originating from the FOCUS clinical trial were analyzed to identify bacteria signatures associated with clinical outcome.

1455 Large-Scale Genome-Wide Association Study of East Asians Identifies Loci Associated With Risk for Colorectal Cancer

Y. Lu, S.-S. Kweon, C. Tanikawa, W.-H. Jia, Y.-B. Xiang, Q. Cai, C. Zeng, S. L. Schmit, A. Shin, K. Matsuo, S. H. Jee, D.-H. Kim, J. Kim, W. Wen, J. Shi, X. Guo, B. Li, N. Wang, B. Zhang, X. Li, M.-H. Shin, H.-L. Li, Z. Ren, J. H. Oh, I. Oze, Y.-O. Ahn, K. J. Jung, D. V. Conti, F. R. Schumacher, G. Rennert, M. A. Jenkins, P. T. Campbell, M. Hoffmeister, G. Casey, S. B. Gruber, J. Gao, Y.-T. Gao, Z.-Z. Pan, Y. Kamatani, Y.-X. Zeng, X.-O. Shu, J. Long, K. Matsuda, and W. Zheng

In a study of more than 60,000 East Asian descendants, 13 new genetic loci were discovered that are associated with an increased risk of colorectal cancer.

1467 Neutrophils Restrict Tumor-Associated Microbiota to Reduce Growth and Invasion of Colon Tumors in Mice

D. Triner, S. N. Devenport, S. K. Ramakrishnan, X. Ma, R. A. Frieler, J. K. Greenson, N. Inohara, G. Nunez, J. A. Colacino, R. M. Mortensen, and Y. M. Shah

Neutrophils are highly abundant in colon tumors. The present work finds that their antibacterial role is essential in limiting tumor invasion and metastasis.

1483 Neuronal Development and Onset of Electrical Activity in the Human Enteric Nervous System

C. J. McCann, M. M. Alves, E. Brosens, D. Natarajan, S. Perin, C. Chapman, R. M. Hofstra, A. J. Burns, and N. Thapar

This study assessed the development of various nerve cells within the human gut nervous system and determined the time in development at which the gut nervous system begins to function.

Basic and Translational—Liver**1496 Multi-Ancestry Genome-Wide Association Study of Spontaneous Clearance of Hepatitis C Virus**

C. Vergara, C. L. Thio, E. Johnson, A. H. Kral, T. R. O'Brien, J. J. Goedert, A. Mangia, V. Piazzolla, S. H. Mehta, G. D. Kirk, A. Y. Kim, G. M. Lauer, R. T. Chung, A. L. Cox, M. G. Peters, S. I. Khakoo, L. Alric, M. E. Cramp, S. M. Donfield, B. R. Edlin, M. P. Busch, G. Alexander, H. R. Rosen, E. L. Murphy, R. Latanich, G. L. Wojcik, M. A. Taub, A. Valencia, D. L. Thomas, and P. Duggal

This study confirmed genetic associations of spontaneous clearance of hepatitis C virus and markers at the *IFNL4-IFNL3* loci and MHC region and identified a new locus within the *G Protein-Coupled Receptor 158* gene in populations of different ancestries.

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- e16 CME Exam 2: An Unusual Cause of Recurrent Epigastric Pain
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AGA SECTION**1508 Inflammatory Bowel Disease in Pregnancy Clinical Care Pathway: A Report From the American Gastroenterological Association IBD Parenthood Project Working Group**

U. Mahadevan, C. Robinson, N. Bernasko, B. Boland, C. Chambers, M. Dubinsky, S. Friedman, S. Kane, J. Manthey, J. Sauberan, J. Stone, and R. Jain

BRIEF COMMUNICATION

- 1525 MyoNeuroGastroIntestinal Encephalopathy: Natural History and Means for Early Diagnosis
G. Corazza, C. Pagan, G. Hardy, G. Besson, and A. Lombès, and the investigators of the MNGIE project

SELECTED SUMMARIES

- 1528 Individuals with Advanced Adenomas are at Increased Risk for Colorectal Cancer
R. Ramkissoon and J. C. Anderson

- 1530 Aspirin: Does it Have a Role for Chemoprevention of Hepatocellular Carcinoma?
P. Marquardt, Y. Hoshida, and A. G. Singal

CORRESPONDENCE

- 1532 Screening for Colorectal Cancer at Earlier Ages: Putting the Cart before the Horse
A. Braillon

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