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CME quiz Editorial accompanies this article Additional online content available Cover

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F. Kanwal and A. G. Singal

ORIGINAL RESEARCH

Full Reports

Clinical—Alimentary Tract

65 Efficacy of Budesonide vs Fluticasone for Initial Treatment of Eosinophilic Esophagitis in a Randomized Controlled Trial

E. S. Dellon, J. T. Woosley, A. Arrington, S. J. McGee, J. Covington, S. E. Moist, J. H. Gebhart, A. E. Tylicki, S. O. Shoyoye, C. F. Martin, J. A. Galanko, J. A. Baron, and N. J. Shaheen

See editorial on page 14.

In a randomized trial, treatment with fluticasone slurry and metered dose inhaler were comparably effective for improving the swallowing symptoms and clinical findings of eosinophilic esophagitis. The decision to use one over another may be based on preference, ease of administration, convenience, and cost.

74 Efficacy of Budesonide Orodispersible Tablets as Induction Therapy for Eosinophilic Esophagitis in a Randomized Placebo-Controlled Trial

A. J. Lucendo, S. Miehlke, C. Schlag, M. Vieth, U. von Arnim, J. Molina-Infante, D. Hartmann, A. J. Bredenoord, C. Ciriza de los Rios, S. Schubert, S. Brückner, A. Madisch, J. Hayat, J. Tack, S. Attwood, R. Mueller, R. Greinwald, A. Schoepfer, and A. Straumann, on behalf of the International EOS-1 Study Group

A new medication, the first officially approved for eosinophilic esophagitis, effectively decreases swallowing problems and inflammation for most patients who don't respond to proton pump inhibitors.

87 Outcomes of Endoscopic Surveillance in Individuals With Genetic Predisposition to Hereditary Diffuse Gastric Cancer

M. F. Jacobs, H. Dust, E. Koeppel, S. Wong, M. Mulholland, E.-Y. Choi, H. Appelman, and E. M. Stoffel

This study compares *CDH1* carriers with and without close family histories of DGC and shows similar outcomes with regards to the incidence of SRCC on endoscopic surveillance and/or gastrectomy.

97 Gut Microbiota in Patients With Irritable Bowel Syndrome—A Systematic Review

R. Pittayanon, J. T. Lau, Y. Yuan, G. I. Leontiadis, F. Tse, M. Surette, and P. Moayyedi

This study compared gut bacteria in IBS patients compared with healthy controls and found an increase in Lactobacillaceae and *Bacteroides* and a decrease in *Bifidobacterium* in patients with IBS.

109 Many Patients With Irritable Bowel Syndrome Have Atypical Food Allergies Not Associated With Immunoglobulin E

A. Fritscher-Ravens, T. Pflaum, M. Mösinger, Z. Ruchay, C. Röcken, P. J. Milla, M. Das, M. Böttner, T. Wedel, and D. Schuppan

See editorial on page 15.

Confocal laser endomicroscopy shows that more than 50% of patients with irritable bowel syndrome that affects 10-15% of most populations have an allergy to common foods. Allergen exclusion led to cure in most patients.

119 Effects of Obesity Surgery on Overall and Disease-Specific Mortality in a 5-Country Population-Based Study

J. H. Kauppila, W. Tao, G. Santoni, M. von Euler-Chelpin, E. Lyngge, L. Tryggvadóttir, E. Ness-Jensen, P. Romundstad, E. Pukkala, and J. Lagergren

This study of 505,258 patients with obesity showed that obese patients overall had higher mortality than the general population, but, among patients with obesity, those who received an anti-obesity operation had lower mortality.

128 A Diet Low in Red and Processed Meat Does Not Reduce Rate of Crohn's Disease Flares

L. Albenberg, C. M. Brensinger, Q. Wu, E. Gilroy, M. D. Kappelman, R. S. Sandler, and J. D. Lewis

A randomized trial showed that in patients with CD in remission, there was no difference in time to relapse in patients assigned to a high versus low red and processed meat diet.

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www

Cost-Effectiveness and National Effects of Initiating Colorectal Cancer Screening for Average-Risk Persons at Age 45 Years Instead of 50 Years*U. Ladabaum, A. Mannalithara, R. G. S. Meester, S. Gupta, and R. E. Schoen*

Initiating colorectal cancer screening at age 45 years instead of 50 years is likely to be cost effective. However, greater benefit at lower cost could be achieved by increasing rates of participation for unscreened older and higher risk persons.

Clinical—Liver

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CME

Effects of Albumin Treatment on Systemic and Portal Hemodynamics and Systemic Inflammation in Patients With Decompensated Cirrhosis

J. Fernández, J. Clària, A. Amorós, F. Aguilar, M. Castro, M. Casulleras, J. Acevedo, M. Duran-Güell, L. Nuñez, M. Costa, M. Torres, R. Horrillo, L. Ruiz-del-Árbol, C. Villanueva, V. Prado, M. Arteaga, J. Trebicka, P. Angeli, M. Merli, C. Alessandria, N. K. Aagaard, G. Soriano, F. Durand, A. Gerbes, T. Gustot, T. M. Welzel, F. Salerno, R. Bañares, V. Vargas, A. Albillos, A. Silva, M. Morales-Ruiz, M. Pavesi, R. Jalan, M. Bernardi, R. Moreau, A. Pérez, and V. Arroyo

Albumin infusions, in patients with decompensated cirrhosis, improve markers of inflammation. This may influence the risk of complications such as infections and organ damage.

Basic and Translational—Alimentary Tract

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PPAR and Interferon Gamma Promote Transformation of Gastric Progenitor Cells and Tumorigenesis in Mice

X. Zuo, Y. Deguchi, W. Xu, Y. Liu, H. S. Li, D. Wei, R. Tian, W. Chen, M. Xu, Y. Yang, S. Gao, J. C. Jaoude, F. Liu, S. P. Chrieki, M. J. Moussalli, M. Gagea, M. M. Sebastian, X. Zheng, D. Tan, R. Broaddus, J. Wang, N. J. Ajami, A. G. Swennes, S. S. Watowich, and I. Shureiqi

This study shows that that increased production of a protein named PPAR-delta by human gastric cancer cells is important to the development of gastric cancer.

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Interactions Between Commensal Bacteria and Enteric Neurons, via FPR1 Induction of ROS, Increase Gastrointestinal Motility in Mice

B. Chandrasekharan, B. J. Saeedi, A. Alam, M. Houser, S. Srinivasan, M. Tansey, R. Jones, A. Nusrat, and A. S. Neish

The intestinal microbiota, and potential probiotic agents, can influence gut motility. This manuscript utilized a mouse model to characterize signaling from beneficial microbiota to the intestine's nervous system.

Basic and Translational—Liver

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Mechanical Stretch Increases Expression of CXCL1 in Liver Sinusoidal Endothelial Cells to Recruit Neutrophils, Generate Sinusoidal Microthrombi, and Promote Portal Hypertension

M. B. Hilscher, T. Sehrawat, J. P. Arab, Z. Zeng, J. Gao, M. Liu, E. Kostallari, Y. Gao, D. A. Simonetto, U. Yaqoob, S. Cao, A. Revzin, A. Beyder, R. A. Wang, P. S. Kamath, P. Kubes, and V. H. Shah

Mechanosensitive angiocrine signals released by liver sinusoidal endothelial cells drive portal hypertension through sinusoidal neutrophil recruitment, neutrophil extracellular traps, and microthrombi formation.

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Ccne1 Overexpression Causes Chromosome Instability in Liver Cells and Liver Tumor Development in Mice

K. Aziz, J. F. Limzerwala, I. Sturmlechner, E. Hurley, C. Zhang, K. B. Jeganathan, G. Nelson, S. Bronk, R. O. Fierro Velasco, E.-J. van Deursen, D. R. O'Brien, J.-P. A. Kocher, S. A. Youssef, J. H. van Ree, A. de Bruin, H. van den Bos, D. C. J. Spierings, F. Foijer, B. van de Sluis, L. R. Roberts, G. J. Gores, H. Li, and J. M. van Deursen

This study described ways the hepatitis B virus and some other viruses might damage liver cells and increase their risk for cancer, by changing their DNA.

- 227** **Combined GS-4774 and Tenofovir Therapy Can Improve HBV-Specific T-Cell Responses in Patients With Chronic Hepatitis**
C. Boni, H. L. A. Janssen, M. Rossi, S. K. Yoon, A. Vecchi, V. Barili, E. M. Yoshida, H. Trinh, T. C. Rodell, D. Laccabue, A. Alfieri, F. Brillo, P. Fiscaro, G. Acerbi, G. Pedrazzi, P. Andreone, C. Cursaro, M. Margotti, R. Santoro, V. Piazzolla, M. R. Brunetto, B. Coco, D. Cavallone, Y. Zhao, A. Joshi, J. Woo, A. H. Lau, A. Gaggar, G. M. Subramanian, B. Massetto, S. Fung, S. H. Ahn, X. Ma, A. Mangia, and C. Ferrari

GS-4774, a yeast-based therapeutic vaccine containing HBV Envelope, X, and Core proteins can efficiently stimulate virus-specific CD8 T-cell responses despite their exhausted phenotype in chronic hepatitis B patients.

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