aga American Gastroenterological Association

Official newspaper of the AGA Institute

mdedge.com/gihepnews

GI&Hepatology News

November 2019

Volume 13 / Number 11

KARI OAKES/MDEDGE NEWS

Dr. Anton Decker, speaking at the AGA Partners in Value Meeting, said that there are ways that GIs can survive current reimbursement trends.

The time is now for physicians to ride the digital disruption wave

BY KARI OAKES
MDedge News

EXPERT ANALYSIS FROM AGA PARTNERS IN VALUE MEETING

CHICAGO – "The health care milieu is ripe for digital disruption," said Anton Decker, MD. Speaking at the American Gastroenterological Association Partners in Value meeting, which was developed in partnership with the Digestive Health Physicians Association, he said that physicians need to become part of the disruption before it's too late.

There's no sign of improvement in worrisome trends in reimbursement, said Dr. Decker, president, international, at the Mayo Clinic, Rochester, Minn. The megamerger trend that is bringing together ever-larger payers, pharmacy benefit managers, and hospital groups is just one manifestation of the trend toward consolidation that's also seen in the airline industry, in financial services, and in telecommunications, he said.

"The math is not good on the payer and health systems side"; but for physicians,

See **Digital** · *page 47*

Risk-based colorectal cancer screening guideline ignites controversy

BY MICHELE G. SULLIVAN
MDedge News

Patients 50-79 years old with a demonstrably low risk of developing the disease within 15 years probably don't need to be screened for colorectal cancer. But if their risk of disease is at least 3% over 15 years, patients should be screened, Lise M. Helsingen, MD, and colleagues wrote in BMJ (2019;367:l5515. doi: 10.1136/bmj.l5515).

For these patients, "We suggest screening with one of the four screening options: fecal immunochemical test (FIT) every year, FIT every 2 years, a single sigmoidoscopy, or a single colonoscopy," wrote Dr. Helsingen of the University of Oslo, and her team.

She chaired a 22-member international panel that developed a collaborative effort from the MAGIC research and innovation program as a part of the BMJ Rapid Recommendations project. The team reviewed 12 research papers comprising almost 1.4 million patients from Denmark, Italy, the Netherlands, Norway, Poland, Spain, Sweden, the United Kingdom, and the United

See **CRC screening** · *page 37*

Biologics beyond anti-TNF therapies show promise for ulcerative colitis

BY DOUG BRUNK
MDedge News

Clinical evidence supporting the use of alternative biologic treatments and regimens for ulcerative colitis in patients who are unable to receive anti–tumor necrosis factor (TNF) therapies is beginning to emerge.

In one of two such trials published in The New England Journal of Medicine on Sept. 26, 2019, researchers led by Bruce E. Sands, MD, AGAF, of the Icahn School of Medicine at Mount Sinai, New York, and associates evaluated ustekinumab

See **Biologics** · *page 18*

INSIDE

GI & HEPATOLOGY NEWS
10255 W Higgins Road,
Suite 280
Rosemont, IL 60018

CHANGE SERVICE REQUESTED

Presorted Standard
U.S. Postage
PAID
Permit No. 384
Lebanon Jct. KY

LETTER FROM THE EDITOR

Digital disruption

One of our lead articles stems from the annual Partners in Value meeting, which was developed by the AGA in partnership with the Digestive Health Physicians Association (Chicago, Oct. 4, 2019). This is an annual meeting about innovations and "what's next" for GI practices. Anton Decker, MD, an expert in the business of GI and Chair of the Practice Management and Economics Committee, discussed "digital disruption."

Dr. Allen

When we discuss digital innovations in health care, most think of telehealth, social media, self-care apps, and remote patient monitoring. As a health system executive, my viewpoint about digital technology has been expanded by other critical needs. At the University of Michigan, we are space constrained (land locked without sufficient parking) and are living with shrinking clinical margins. We see digital technology as a solution to both. As we consolidate our call centers from 27 sites to 1, we plan for 30% of our staff to work from home. Setting up a home work station costs $3,000, compared with office space costs (about $5,000/year). A new clinical site might cost $20 million to build, but that is a fraction of the true life-cycle cost of the building. We have a widely distributed patient base (imagine traveling from Michigan's Upper Penisula to Ann Arbor for a 20-minute clinic visit). Many people appreciate "seeing" their doctor from the comfort of their living room. We plan to convert at least 15% of patient visits to telehealth over the next few years although re-

This year, more than 80% of postsurgical visits (90-day bundled payment) were conducted virtually – mostly by NPs or PAs. Our GI psychologist converted 1,500 patient visit-hours to virtual visits last year.

Continued on page 8

DDSEP 9 Digestive Diseases Self-Education Program — Quick quiz

Q1. You are evaluating a 77-year-old man for obstructive jaundice and weight loss. The patient reports an approximate 25-pound weight loss over the last month. He denies abdominal pain. Labs reveal a total bilirubin of 17.5 mg/dL, alkaline phosphatase of 441 IU/L, aspartate aminotransferase of 60 IU/L, alanine aminotransferase of 70 IU/L, lipase of 41 U (ULN 50 U), and WBC of 8 × 10^9/L. A right upper–quadrant ultrasound is obtained and shows intra- and extrahepatic biliary dilation up to 2 cm. A subsequent pancreas protocol CT is notable for narrowing of the mid bile duct with a normal downstream common bile duct. A mass is not visualized within the pancreas. CA 19-9 is elevated to 1,900 U/mL and CEA is 8 ng/ mL. You are concerned for a possible extrahepatic cholangiocarcinoma.

Which of these is not a risk factor for cholangiocarcinoma?

A. PSC
B. Type IV choledochal cyst
C. *Opisthorchis viverrini* infection
D. Obesity
E. Cirrhosis
F. *Fasciola hepatica* infection

Q2. A 29-year-old woman at 37 weeks' gestation presents to the emergency room with right upper–quadrant pain, nausea, vomiting. She is diagnosed with preeclampsia. She is treated with intravenous magnesium, antihypertensive therapy, and induction of labor. Prior to delivery, laboratory values were as follows: aspartate aminotransferase, 240 U/L; alanine aminotransferase, 220 U/L; total bilirubin, 1.8 mg/dL; hemoglobin, 10.1 g/dL; platelets, 110,000 microL. Forty-eight hours after delivery, she complained of worsening right upper–quadrant pain and headache. Repeat laboratory values 48 hours post partum were as follows: AST, 410 U/L; ALT, 390 U/L; total bilirubin, 5.1 mg/dL; hemoglobin, 7.9 g/dL; and platelets 75,000 microL.

Which of the following is the most likely diagnosis?

A. Sepsis with hemolytic-uremic syndrome (HUS) and thrombotic thrombocytopenic purpura (TTP)
B. Acute fatty liver of pregnancy
C. Flare of autoimmune hepatitis
D. Hemolysis, elevated liver enzymes, low platelet count (HELLP) syndrome
E. Acute hepatitis A infection

The answers are on page 17.

aga American Gastroenterological Association
Official newspaper of the AGA Institute mdedge.com/gihepnews
GI&Hepatology News

MDedge™

GI & Hepatology News is the official newspaper of the American Gastroenterological Association (AGA) Institute and provides the gastroenterologist with timely and relevant news and commentary about clinical developments and about the impact of health care policy. Content for **GI & Hepatology News** is developed through a partnership of the newspaper's medical board of editors (Editor in Chief and Associate Editors), Frontline Medical Communications Inc. and the AGA Institute Staff. "News from the AGA" is provided exclusively by the AGA, AGA Institute, and AGA Research Foundation. All content is reviewed by the medical board of editors for accuracy, timeliness, and pertinence. To add clarity and context to important developments in the field, select content is reviewed by and commented on by external experts selected by the board of editors.

POSTMASTER Send changes of address (with old mailing label) to GI & Hepatology News, Subscription Service, 10255 W Higgins Road, Suite 280, Rosemont, IL 60018-9914.
RECIPIENT To change your address, contact Subscription Services at 1-800-430-5450. For paid subscriptions, single issue purchases, and missing issue claims, call Customer Service at 1-833-836-2705 or e-mail custsvc.gihep@fulcoinc.com
The AGA Institute headquarters is located at 4930 Del Ray Avenue, Bethesda, MD 20814, ginews@gastro.org.
Editorial Offices 2275 Research Blvd, Suite 400, Rockville, MD 20850, 240-221-2400, fax 240-221-2548
GI & Hepatology News (ISSN 1934-3450) is published monthly for $230.00 per year by Frontline Medical Communications Inc., 7 Century Drive, Suite 302, Parsippany, NJ 07054-4609. Phone 973-206-3434, fax 973-206-9378

Scan this QR Code to visit mdedge.com/gihepnews

Frontline Medical Communications Society Partners
VP/Group Publisher; Director, FMC Society Partners Mark Branca
Executive Editors Denise Fulton, Kathy Scarbeck
Editor Lora T. McGlade
Creative Director Louise A. Koenig
Director, Production/Manufacturing Rebecca Slebodnik
National Account Manager Artie Krivopal, 973-290-8218, cell 973-202-5402, akrivopal@mdedge.com
Digital Account Manager Rey Valdivia, 973-206-8094, rvaldivia@mdedge.com
Senior Director of Classified Sales Tim LaPella, 484-921-5001, tlapella@mdedge.com
Advertising Offices 7 Century Drive, Suite 302, Parsippany, NJ 07054-4609 973-206-3434, fax 973-206-9378

FRONTLINE MEDICAL COMMUNICATIONS

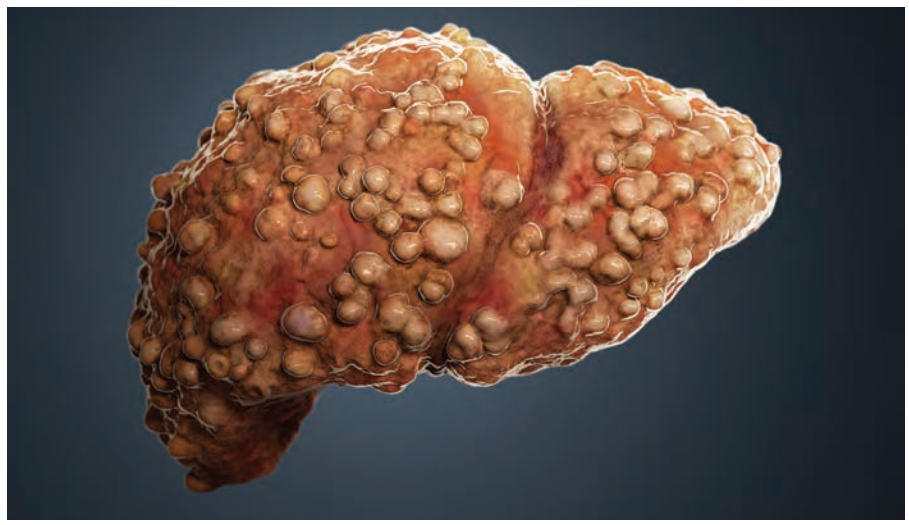
Corporate
SVP, Finance Steven J. Resnick
VP, Operations Jim Chicca
VP, Sales Mike Guire
VP, Society Partners Mark Branca
VP, Editorial Director, Clinical Content Karen Clemments
VP, Digital Content & Strategy Amy Pfeiffer
President, Custom Solutions JoAnn Wahl
VP, Custom Solutions Wendy Raupers
VP, Human Resources & Facility Operations Carolyn Caccavelli
Data Management Director Mike Fritz
Circulation Director Jared Sonners
Corporate Director, Research & Comms. Lori Raskin
Director, Custom Programs Patrick Finnegan

In affiliation with Global Academy for Medical Education, LLC
President David J. Small, MBA

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

Fibrosis severity and cirrhosis drive patient-reported outcomes with NASH

BY HEIDI SPLETE
MDedge News



SEBASTIAN KAULITZKI/THINKSTOCK

Patients with nonalcoholic steatohepatitis (NASH) and advanced fibrosis reported lower quality of life that is worsened in those who develop cirrhosis, based on data from 1,667 individuals.

NASH is becoming an increasingly common cause of liver disease, cirrhosis, and hepatocellular carcinoma and can have a negative effect on patients' quality of life and other patient-reported outcomes (PROs), but studies of the impact on PROs in these patients are limited, wrote Zobair M. Younossi, MD, of the Inova Health System, Falls Church, Va., and colleagues.

In a study published in Clinical Gastroenterology and Hepatology, the researchers reviewed data from 870 adults with NASH cirrhosis and 797 with NASH and bridging fibrosis. The average age of the patients was 58 years, 73% were white, 40% were male, 52% had cirrhosis, and 74% had diabetes.

Key clinical point
Patients with NASH and cirrhosis scored an average of 71.6 out of 100 on the role physical domain of the SF-36 vs. 75.4 for patients with NASH and bridging fibrosis.

The researchers used four tools to assess quality of life: the SF-36 (36-Item Short Form Health Survey), the EQ-5D (Euroqol, a generic health questionnaire), the CLDQ-NASH (Chronic Liver Disease Questionnaire-NASH), and the WPAI:SHP (Work Productivity and Activity Impairment: Specific Health Problem).

The SF-36 score is based on eight domains: physical functioning, role physical, bodily pain, general health, vitality, social functioning, role emotional, and mental health.

Overall, patients with NASH and cirrhosis had significantly lower scores on domains of the SF-36 that related to physical function, compared with bridging fibrosis patients (70.3 vs. 73.6), as well as role physical (71.6 vs. 75.4) and bodily pain (65.0 vs. 68.6). The other areas of significant impairment in NASH patients with cirrhosis, compared with NASH patients with fibrosis, appeared in four domains of the disease-specific CLDQ-NASH: activity, emotional, fatigue, and worry. In addition, the EQ-5D utility score was significantly lower in cirrhosis patients, compared with fibrosis patients.

Older age, male sex, Asian race, and U.S. location of study enrollment were independent predictors of higher PRO scores in a multivariate analysis, while black race, history of smoking, history of diabetes, higher body mass index, cirrhosis, and history of comorbidities that were gastrointestinal, musculoskeletal, psychiatric, or neurologic were independent predictors of lower PRO scores in patients with advanced fibrosis and NASH.

WPAI:SHP scores, which focused on work productivity impairment and absenteeism, were not significantly different between the groups.

The study findings were limited by several factors including the specific nature of the study population and absence of non-NASH controls, the potential of false positives because of the use of self-reports, and the lack of longitudinal data, the researchers said. The results should be verified in a larger, diverse patient population, the researchers noted, but the data highlight the impairment in quality of life and productivity among patients with NASH and "can inform patients, clinicians, payers, and policymakers about the total burden of the disease and also the comprehensive benefit of treatment," they concluded.

The study was supported by Gilead Sciences. Dr. Younossi disclosed relationships with Gilead Sciences, as well as Intercept, NovoNordisk, BMS, Allergan/Tobira, Terns, Viking, AbbVie, Novartis, and Quest Diagnostics.

ginews@gastro.org

SOURCE: Younossi ZM et al. Clin Gastroenterol Hepatol. 2019. doi: 10.1016/j.cgh.2019.02.024.

Continued from page 6

imbursement rules are still limiting. This year, more than 80% of postsurgical visits (90-day bundled payment) were conducted virtually – mostly by NPs or PAs. Our GI psychologist converted 1,500 patient visit-hours to virtual visits last year. In 2019, we completed over 4,000 evisits (management of simple conditions initiated by a patient – essential during flu season) and an increasing number of consults (primary consultations to specialists). Project ECHO (N Engl J Med. 2011;364:2199) remains the star example of how digital health can improve access, especially for underserved communities.

Virtual care, telehealth, remote patient monitoring, telecommuting, and other digital innovations are becoming standards for health systems. Now is the time to think of "face-to-face" visits as option B.

John I. Allen, MD, MBA, AGAF
Editor in Chief

Direct-acting antiviral therapy boosts survival for infected HCC patients

BY HEIDI SPLETE
MDedge News

Direct-acting antiviral therapy significantly reduced the risk of death in patients with hepatitis C infections and a history of hepatocellular carcinoma, based on data from 797 individuals.

Previous studies have reported a benefit of direct-acting antiviral (DAA) therapy for reducing mortality in patients with hepatocellular carcinoma (HCC), but data on its impact in patients with complete responses to HCC therapy are limited, wrote Amit G. Singal, MD, of the University of Texas, Dallas, and colleagues.

In a study published in Gastroenterology, the researchers identified adult HCC patients who achieved complete treatment response between January 2013 and December 2017. The study included patients from 31 locations in the United States and Canada. Complete response to treatment was defined as "disappearance of arterial enhancement from all HCC lesions on contrast-enhanced cross-sectional imaging."

A total of 383 (48.1%) of patients were randomized to DAA therapy, and 414 (51.9%) did not receive DAA treatment for their hepatitis C viral infection after complete response to prior HCC therapy.

A total of 43 deaths occurred among DAA patients over 941 person-years of follow-up, compared with 103 deaths over 527 person-years of follow-up for the untreated controls. Overall, DAA therapy was associated with a significantly reduced risk of death (hazard ratio, 0.54), compared with no therapy. Of note, patients

Continued on following page

Two studies reveal preneoplastic links between *H. pylori* and gastric cancer

BY WILL PASS
MDedge News

Molecular pathways linked with CD44 variant 9 (CD44v9), a cell surface glycoprotein tied to aggressive gastric cancer after *Helicobacter pylori* infection, may open doors to stop cancer before it starts, according to two recent studies.

Findings from the first study suggest that persistent inflammation after eradication therapy may continue to drive cancer risk after infection, while the second study revealed a potential therapeutic target related to preneoplastic changes.

The first study, conducted by lead author Hitoshi Tsugawa, PhD, of Keio University, Tokyo, and colleagues, aimed to determine the origin of CD44v9-positive cancer stem-like cells.

"These cells strongly contribute to the development and recurrence of gastric cancer," the investigators wrote. Their report is in Cellular and Molecular Gastroenterology and Hepatology. "However, the origin of CD44v9-positive cells is uncertain."

'Targeting xCT may prove an effective tool for arresting metaplasia development in the stomach as well as mucous metaplasia in other epithelial tissues for the analysis of cellular plasticity and oxidative stress response.'

The association between *H. pylori* infection and gastric cancer has been documented, along with a high risk of cancer when gastric epithelial cells overexpress capping actin protein of muscle Z-line alpha subunit 1 (CAPZA1), the researchers noted. Although it has also been shown that CAPZA1 overexpression leads to intracellular accumulations of the *H. pylori*–derived oncoprotein cytotoxin-associated gene A (CagA), just how these phenomena were connected remained unknown.

Through in vitro analyses of human cells, and in vitro and in vivo experiments involving Mongolian gerbils, the investigators uncovered a chain of events between *H. pylori* infection and CD44v9 expression. First, the investigators showed that expression levels of CD44v9 and CAPZA1 were directly correlated in five human cases of gastric cancer. Next, several experiments revealed that *H. pylori*–related oxidative stress drives overexpression of CAPZA1, which, in combination with high levels of beta-catenin, ESRP1, and CagA, promotes expression of CD44v9.

Most directly relevant to future therapies, the investigators compared levels of CAPZA1 between five active cases of *H. pylori* infection versus five cases successfully treated with eradication therapy. After eradication therapy, CAPZA1 overexpression decreased, but not to a significant degree.

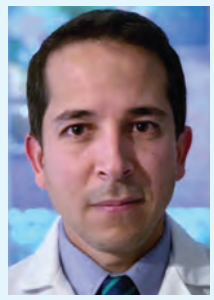
"Our findings suggest that CAPZA1-overexpressing cells remaining in the gastric mucosa after eradication therapy increase the risk of metachronous gastric cancer and that reduction of CAPZA1 expression by amelioration of chronic inflammation after eradication therapy is important to prevent the development of gastric cancer," the investigators concluded.

The second study, by lead author Anne R. Meyer, a graduate student at Vanderbilt University, Nashville, Tenn., and colleagues, evaluated how zymogenic chief cells are reprogrammed into spasmolytic polypeptide-expressing metaplasia (SPEM), a precursor to dysplasia and gastric cancer.

It had been previously shown that reprogramming to SPEM is promoted and maintained by epithelial cell damage, such as that caused by *H. pylori* infection, but underlying processes remained unclear, until recent studies suggested a link between SPEM transition and upregulation of CD44v9. Knowing that CD44v9 stabilizes the cystine/glutamate antiporter xCT, the investigators homed in on xCT

Continued on following page

The mechanisms by which injured cells respond to stress rely in part on their ability to reprogram themselves in the setting of injury. This cellular reprogramming involves sensing and regulating intracellular metabolic cues that dictate survival, organization of secretory and degradative machinery, and proliferation. Meyer et al. and Tsugawa et al. illustrate two distinct mechanisms by which gastric epithelial cells handle oxidative stress during injury.



Dr. Sáenz

Meyer et al. focus on the xCT subunit of the cystine/glutamate antiporter as a rheostat for intracellular glutathione stores. Pharmacologic inhibition of xCT activity using sulfasalazine hampers the ability of injured gastric epithelial cells to adequately deal with reactive oxygen species. Importantly, these cells do not appropriately reprogram during injury and instead undergo apoptosis. Tsugawa et al. provide mechanistic insight into how oxidative stress may promote precancerous changes in gastric epithelium. Following *H. pylori* infection, an intracellular oxidative environment that is characterized by an overexpression of the actin filament capping protein CAPZA1, beta-catenin, and the alternative splicing factor ESRP1, promotes expression of CD44 variant 9 (CD44v9), a cell surface glycoprotein that correlates with gastric cancer. Interestingly, this oxidative milieu promotes accumulation of a critical *H. pylori* virulence factor, CagA, within infected cells.

Taken together, the ability to manage oxidative stress during cellular injury has significant implications for cell fate. It seems likely that the mechanisms for regulating intracellular oxidative stress are not unique to gastric epithelium and instead underlie a conserved injury response that has correlates in other gastrointestinal organs.

José B. Sáenz, MD, PhD, is an investigator and instructor of medicine in the gastroenterology division, John T. Milliken Department of Internal Medicine at the Washington University in St. Louis School of Medicine. He has no conflicts of interest.

Continued from previous page

with a sustained virologic response showed a reduced risk of death (HR, 0.29), but those without a sustained virologic response to DAA therapy did not (HR, 1.13).

The findings support those from previous studies suggesting that DAA therapy may reduce mortality in patients with a history of HCC, the researchers said.

The study findings were limited by several factors, including potential confounding if DAA was given to patients with better prognoses, the researchers noted. Other limitations include the use of imaging in routine clinical care rather than centralized review, the loss of approximately 9% of the patients to follow-up, and the lack of data on hepatic decompensation during follow-up, the researchers said. However, the results were strengthened by the multicenter design, large cohort, and inclusion of untreated controls, and support the use of DAA therapies as "likely beneficial in HCV-infected patients with a history of HCC," they concluded.

The study was funded in part by the National Cancer Institute and AbbVie. Dr. Singal disclosed relationships with companies including AbbVie, Gilead, Bayer, Eisai, Wako Diagnostics, Exact Sciences, Exelixis, Roche, Glycotest, and Bristol-Myers Squibb.

ginews@gastro.org

SOURCE: Singal AG et al. Gastroenterology. 2019. doi: 10.1053/j.gastro.2019.07.040.

Clip closure reduced bleeding after large lesion resection

BY HEIDI SPLETE
MDedge News

Use of clip closure significantly reduced delayed bleeding in patients who underwent resections for large colorectal lesions, based on data from 235 individuals.

"Closure of a mucosal defect with clips after resection has long been considered to reduce the risk of bleeding," but evidence to support this practice is limited, wrote Eduardo Albéniz, MD, of the Public University of Navarra (Spain), and colleagues.

None of the patients who experienced delayed bleeding required surgical or angiographic intervention, although 15 of the 20 patients with bleeding underwent additional endoscopy.

In a study published in Gastroenterology, the researchers identified 235 consecutive patients who had resections of large nonpedunculated colorectal lesions from May 2016 to June 2018. Patients had an average or high risk of delayed bleeding and were randomized to receive scar closure with either 11-mm through-the-scope clips (119 patients) or no clip (116 patients).

Delayed bleeding occurred in 14 control patients (12.1%), compared with 6 clip patients (5%), for a risk reduction of 7%. The clip group included 68 cases (57%) of complete closure and 33 cases (28%) with partial closure, as well as 18 cases of failure to close (15%); only 1 case of delayed bleeding occurred in the clip group after completion of clip closure. On average, six clips were needed for complete closure.

None of the patients who experienced delayed bleeding required surgical or angiographic intervention, although 15 of the 20 patients with bleeding underwent additional endoscopy. Other adverse events included immediate bleeding in 21 clip patients and 18 controls that was managed with snare soft-tip coagulation. No deaths were reported in connection with the study.

Demographics were similar between the two groups, but the subset of patients with complete closure included more individuals aged 75 years and older and more cases with smaller polyps, compared with other subgroups, the researchers noted.

The study findings were limited by several factors, including the difficulty in predicting delayed bleeding, the potential for selection bias given the timing of patient randomization, the lack of information about polyps that were excluded from treatment, and the difficulty in completely closing the mucosal defects, the researchers noted. However, the results suggest that complete clip closure, despite its challenges, "displays a clear trend to reduce delayed bleeding risk," and is worth an attempt.

The study was supported by the Spanish Society of Digestive Endoscopy. The researchers had no financial conflicts to disclose. MicroTech (Nanjing, China) contributed the clips used in the study.

ginews@gastro.org

SOURCE: Albéniz E et al. Gastroenterology. 2019 Jul 27. doi: 10.1053/j.gastro.2019.07.037.

Watch this story's Video Insights at
youtube.com/user/AmerGastroAssn/

With the advent of routine submucosal lifting prior to endoscopic mucosal resection, perforation now occurs less commonly; however, delayed bleeding following resection remains problematic given the aging population and increasing use of antithrombotic agents. In this study, clip closure resulted in a decrease in post-polypectomy bleeding in patients deemed to be at high risk (at least 8%) for delayed bleeding.


Dr. Baron

The protective benefit of clip closure was seen almost exclusively in patients who had complete closure of the defect, which was achieved in only 57% of procedures. Clinical efficacy is largely driven by endoscopist skill level and the ability to achieve complete closure. Notably, defects that were successfully clipped were smaller in size, had better accessibility, and were technically easier. Defining such procedural factors a priori is important and may influence whether one should attempt clip closure if complete clip closure is unlikely. Interestingly, the bleeding rate was higher in the control group in lesions proximal to the transverse colon, where clip closure is likely to be most beneficial and cost effective, based on emerging data. It's worth noting that the clips used in this study were relatively small (11 mm), and not currently available in the United States, although most endoscopic clips function similarly.

Studies such as this provide evidenced-based medicine to endoscopic practice. Hemostatic clips were introduced nearly 20 years ago without evidence for their effectiveness. Future studies are needed, such as those that compare electrocautery-based resection of high-risk polyps with standard clips to over-the-scope clips, and those that compare electrocautery-based resection to cold snare resection.

Todd H. Baron, MD, is a gastroenterologist based at the University of North Carolina, Chapel Hill. He is a speaker and consultant for Olympus, Boston Scientific, and Cook Endoscopy.

Continued from previous page

for a closer look, questioning what role it had in chief cell reprogramming. Again, oxidative stress was identified as the inciting pathophysiologic driver.

"The oxidative stress response, including upregulation of nutrient transporters, plays an important role in many biological processes and the pathogenesis of a variety of diseases," the investigators wrote in their report, published in Cellular and Molecular Gastroenterology and Hepatology. "Perturbations to the CD44v9-xCT system often result in redox imbalance."

By using a combination of mouse and human cell lines, and a mouse model, the investigators demonstrated that xCT was upregulated during the initial stages of chief cell programming. Blocking xCT with sulfasalazine after acute gastric injury limited SPEM transition by more than 80%, an effect that was further supported by xCT siRNA knockdown and observations in xCT knockout mice. Reduction in chief cell reprogramming was not observed in the presence of sulfasalazine metabolites, suggesting that the anti-inflammatory properties of sulfasalazine were not responsible for downregulation of reprogramming.

"Targeting xCT may prove an effective tool for arresting metaplasia development in the stomach as well as mucous metaplasia in other epithelial tissues for the analysis of cellular plasticity and oxidative stress response," the investigators concluded.

The study by Tsugawa and colleagues was funded by Grants-in-Aid for Scientific Research; the Yakult Bio-Science Foundation; the Ministry of Education, Culture, Sports, Science and Technology (MEXT)–supported program for the Strategic Research Foundation at Private Universities; and Keio Gijuku Academic Development Funds. Dr. Suzuki disclosed relationships with Daiichi-Sankyo, EA Pharma, Otsuka Pharmaceutical, and others. The study by Meyer and colleagues was funded by the National Institutes of Health, the American Association of Cancer Research, the Department of Defense, and others, with no relevant conflicts of interest.

ginews@gastro.org

SOURCES: Meyer AR et al. CMGH. 2019 May 6. doi: 10.1016/j.jcmgh.2019.04.015; Tsugawa H et al. CMGH. 2019 May 27. doi: 10.1016/j.jcmgh.2019.05.008.

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

IBS complaints differ with diarrhea versus constipation

BY HEIDI SPLETE
MDedge News

At least 50% of patients with irritable bowel syndrome (IBS) described their condition as "extremely bothersome" based on survey data from 3,254 individuals. However, differences in the nature of other symptoms among IBS subtypes, namely IBS with diarrhea (IBS-D) and IBS with constipation (IBD-C), have not been well studied, wrote Sarah Ballou, PhD, of Beth Israel Deaconess Medical Center, Boston, and colleagues.

In a study published in Clinical Gastroenterology and Hepatology, the researchers reviewed survey results from 1,587 individuals with IBS-D and 1,667 with IBS-C. The average age of

Watch this story's Video Insights at
youtube.com/user/AmerGastroAssn/

the patients was 47 years, 81% were female, and 90% were white.

Approximately 84% of patients with IBS-C and 93% of those with IBS-D reported abdominal pain, the most common symptom in both groups. Overall, 36% of the 1,885 patients employed or in school reported decreased productivity in those settings.

IBS-C patients were significantly more likely to report that their symptoms caused them to avoid sex, feel self-conscious about their bodies, have trouble concentrating, and feel "not

Continued on following page

IBS patients experience frequent symptoms of abdominal pain and changes in bowel function, often on a weekly basis.

Intuitively, these bowel disturbances translate into considerable emotional and social burdens. This study by Ballou and colleagues provides important insight into the impact of IBS on affected individuals. As with other studies, they found that IBS patients report decreased work productivity and greater absenteeism. The investigators also observed that symptoms affect the IBS subtypes (constipation- and diarrhea-predominant) differently. Constipation-predominant IBS patients struggled more with internal and interpersonal issues (e.g., self-consciousness and sex avoidance), while diarrheal-predominant patients were more preoccupied by social and external concerns (e.g., bathroom availability, leaving the house). Both IBS subtypes expressed a willingness to go to considerable lengths in a theoretical "trade-off" to obtain symptom relief. A remarkable percentage of patients were willing to forgo both primitive drives (sex in 40% of respondents) and modern conveniences (cellphones and internet in more than 20% of respondents) in exchange for IBS relief.


Dr. Sayuk

In light of these findings, it is not surprising that previous surveys observed considerable IBS patient acceptance of treatments with higher risks of serious adverse events in return for better symptom control. In recent years, several novel therapies have emerged as effective options for the management of IBS. Of course, these newer IBS medications are more costly, and some have potentially serious adverse events. In balance, gastroenterology providers must recall the substantial effect of IBS symptoms on the well-being and daily functioning of the individual, and account for this major burden when making IBS treatment recommendations.

Gregory S. Sayuk, MD, MPH, AGAF, is an associate professor, department of medicine, division of gastroenterology, and department of psychiatry, and associate program director, gastroenterology training, Washington University in St. Louis; and a staff physician, John Cochran VA Medical Center, St. Louis. He has no relevant conflicts.

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

FDA transition to disposable component duodenoscopes

The U.S. Food and Drug Administration (FDA) recently released a safety communication recommending duodenoscope manufacturers and health care facilities move away from using duodenoscopes with fixed endcaps to those with disposable components that include disposable endcaps – or to fully disposable duodenoscopes when they become available. This announcement may have already produced some questions among your patients when it comes to their procedures that use a duodenoscope, such as endoscopic retrograde cholangiopancreatography (ERCP).

AGA has developed frequently asked questions and talking points below that can help you explain ERCP and infection risk when your patients come to you with questions.

Talking points:

• Duodenoscopes are an important tool used during an ERCP to help localize and treat abnormal issues in your bile duct system and pancreas, and possibly help you avoid surgery.

• The complex design of duodenoscopes can sometimes result in bacteria remaining in a small portion of the duodenoscope (the "elevator channel") even after careful cleaning according to approved instructions. However, the chance of getting an identified "superbug infection" with a duodenoscope is very low, currently estimated at 1 per 20,000 ERCPs performed in more than 650,000 U.S. ERCP procedures each year. FDA continues to work with duodenoscope manufacturers to provide strict guidelines for cleaning and disinfection of these tools.

• The switch to new duodenoscopes with disposable components will be slow and orderly to make sure that there are enough duodenoscopes to perform ERCPs so that patients who need this often life-saving procedure will still have access.

• Do not cancel or delay any planned procedure without first discussing the benefits and risks with me or another health care provider, as delaying the procedure and alternatives like surgery or radiologic intervention may be riskier than a timely ERCP.

• The esophagogastroduodenoscopy (EGD) procedure does not use the same tool that is used for ERCP. EGD uses a different endoscope than ERCP and has not been shown to have the same risk of infection because there is no "elevator channel."

ginews@gastro.org

Talking to your patients about ranitidine

The FDA recently released safety alerts on ranitidine formulations, including the brand-name drug Zantac, which were found to contain the nitrosamine impurity *N*-nitrosodimethylamine (NDMA) at low levels. NDMA is classified as a probable human carcinogen based on results from laboratory tests and animal studies. NDMA is a known environmental contaminant and found in water and foods.

The FDA is testing ranitidine products from multiple manufacturers and is assessing the potential effect on patients who have been taking ranitidine.

With the voluntary recall of 14 lots of prescription ranitidine capsules distributed by Sandoz, as well as the voluntary recall of over-the-counter ranitidine tablets (75 mg and 150 mg), labeled by Walgreens, Walmart, and Rite-Aid and manufactured by Apotex, your patients might be asking a lot of questions about whether to continue using their medicines and what alternatives are available.

Talking to your patients

The FDA safety alerts have been covered by various media outlets since early September. This may cause your patients to question whether they should stay on or start using ranitidine products. When discussing the recall with your patients, let them know that:

• Ranitidine is an H_2 blocker (antihistamine) – available OTC and in prescription strength – used to prevent and relieve heartburn associated with acid indigestion and sour stomach. It reduces stomach acid and works longer but not as quickly as antacids.

• Not all ranitidine medicines marketed in the United States are being recalled and the FDA is not recommending individuals stop taking all ranitidine medicines at this time.

• It might be prudent to hold off taking Zantac until a final FDA conclusion is released.

• Multiple drugs are approved for the same or similar uses as ranitidine. Other treatment options are available, both prescription and OTC, for patients who are concerned about ranitidine.

• Life-style modifications may reduce or eliminate the need for heartburn drugs. These include weight loss, tobacco avoidance, or a change in eating patterns. Share AGA's patient education content on GERD for more tips for your patients.

ginews@gastro.org

Continued from previous page

like myself," compared with IBS-D patients (*P* less than .004 for all).

IBS-D patients were significantly more likely to report that their symptoms caused them to avoid traveling in general, avoid places without bathrooms, avoid leaving the house, and have trouble making plans, compared with IBS-C patients (*P* less than .004 for all).

The survey also asked respondents what they would give up for 1 month in exchange for 1 month of relief from IBS symptoms. Overall, approximately 60% said they would give up alcohol, 55% said they would give up caffeine, 40% would give up sex, 24.5% would give up their cell phones, and 21.5% would give up the internet, the researchers wrote.

The study findings were limited by several factors, including the absence of survey respondents with mixed-type IBS, the reliance on self-reports, and the potential for recall bias. Also, the study was not designed to assess the impact of other comorbidities and did not include non-IBS controls, the researchers noted.

"This study highlights important differences between IBS-C and IBS-D, which could impact the development and refinement of mind-body therapies for IBS, with tailored treatment goals for each IBS subtype. For example, treatment tailored specifically for IBS-D may be more behaviorally focused (e.g., exposure to specific situations outside the home) while treatment for IBS-C may be more cognitively focused (e.g., evaluating self-esteem and beliefs about self and others) in addition to targeting the bowel dysfunction and pain," they said.

The researchers had no conflicts.

ginews@gastro.org

SOURCE: Ballou S et al. Clin Gastroenterol Hepatol. 2019 Aug 13. doi: 10.1016/j.cgh.2019.08.016.

Top AGA Community patient cases

Physicians with difficult patient scenarios regularly bring their questions to the AGA Community (https://community.gastro.org) to seek advice from colleagues about therapy and disease management options, best practices, and diagnoses. In case you missed it, here are the most popular clinical discussions shared in the forum recently:

1. Severe ulcerative colitis (http://ow.ly/inHW30pGaAH) – A 41-year-old female patient with ulcerative colitis had a flare that didn't improve with adalimumab and prednisone, and was admitted to the hospital with bloody stools and abdominal pain. The GI community discussed considerations for next steps and other tests to consider.

2. Unexplained diarrhea (http://ow.ly/xWKA30pGaXF) – Following the eQ&A with an AGA guideline coauthor on chronic diarrhea, this case discussion follows a celiac disease patient on a gluten-free diet who continues to have significant diarrhea and fatigue.

3. Difficult ERCP (http://ow.ly/qCPC30pGb7h) – How would you handle an ERCP where the papilla is small and in a tricky location? View photos from your colleague's scope and share your advice with the GI community.

Access these clinical cases and more discussions at https://community.gastro.org/discussions.

The importance of getting involved for gastroenterology

BY AMIT PATEL, MD

On Sept. 20, I had the opportunity to participate in AGA's Advocacy Day for the second time, joining 40 of our gastroenterology colleagues from across the United States on Capitol Hill to advocate for our profession and our patients.

AGA Institute

N.C. delegation for Advocacy Day.

Advocacy Day began with a group breakfast during which we reviewed some of the policy issues of central importance to gastroenterology:

- Removing Barriers to the Colorectal Cancer Screening Act, HR1570/S668, which enjoys strong bipartisan support, would correct the "cost-sharing" problem of screening colonoscopies turning therapeutic (with polypectomy) for our Medicare patients, by waiving the coinsurance for screening colonoscopies – regardless of whether we remove polyps during these colonoscopies.
- Safe Step Act, HR2279, legislation introduced in the House, facilitates a common-sense and timely (72 hours or 24 hours if life-threatening) appeals process when our patients are subjected to step therapy by insurers.
- Improving Seniors' Timely Access to Care Act of 2019, HR3107, legislation in the House, eases onerous prior authorization burdens by promoting an electronic prior authorization process, ensuring requests are approved by qualified medical professionals who have specialty-specific experience, and mandating that plans report their rates of delays and denials.
- NIH research funding facilitates innovative research and supports young investigators in our field.

Full of enthusiasm, our six-strong North Carolina contingent (pictured above, L-R, Ziad Gellad, MD, MPH, AGAF; David Leiman, MD, MSPH; Animesh Jain, MD; Anne Finefrock Peery, MD; Lisa Gangarosa, MD, AGAF, chair of the AGA Government Affairs Committee; and Amit Patel, MD) met with the offices of Rep. David Price (D-N.C.), and both North Carolina Senators, Richard Burr (R) and Thom Tillis (R) to convey our "asks."

At Rep. Price's office in the stately Rayburn House Office Building, we thanked his team for cosponsorship of HR 1570 and HR 2279. We also discussed the importance of increasing research funding by the AGA's goal of $2.5 billion for NIH for fiscal year 2020, noting that a majority of our delegation has received NIH funding for our training and/or research activities. We also encouraged Rep. Price's office to cosponsor HR 3107, sharing our personal experiences about the administrative toll of the prior authorization process for obtaining appropriate and recommended medications for our patients – in my case, swallowed topical corticosteroids for patients with eosinophilic esophagitis.

We moved on to Sen. Tillis's office, where we thanked his office for cosponsorship of S 668 but encouraged his office to cosponsor upcoming companion Senate legislation for HR 2279 and HR 3107. Our colleague capably conveyed how an inflammatory bowel disease (IBD) patient he saw recently may require a colectomy due to delays in appropriate treatment stemming from these regulatory processes. We also showed Sen. Tillis's office how NIH funding generates significant economic activity in North Carolina, supporting jobs in our state.

After a quick stop at the U.S. Senate gift shop to buy souvenirs for our kids, our last meeting was with Sen. Burr's office. There, we also thanked his office for cosponsorship of S 668 but encouraged him to sign the "Dear Colleague" letter that Sen. Sherrod Brown, D-Ohio, has circulated asking CMS to address the colonoscopy cost-sharing "loophole." We discussed the importance of cosponsoring upcoming companion Senate legislation for HR 2279 and HR 3107, sharing stories from our clinical practices about how these regulatory burdens delayed treatment for our patients.

You can get involved, too.

AGA Advocacy Day was a tremendous experience, but it is not the only way AGA members can get involved and take action. The AGA Advocacy website, gastro.org/advocacy, provides more information on multiple avenues for advocacy. These include an online advocacy tool for sending templated letters on these issues to your elected officials.

Now more than ever, it is crucial that we get involved to support gastroenterology and advocate for our patients.

Dr. Patel is assistant professor, division of gastroenterology, Duke University, Cary, N.C.; member, AGA Clinical Guidelines Committee.

A letter from Robert S. Sandler, MD, MPH, AGAF, Chair of the AGA Research Foundation

aga research foundation

Dear Colleagues,
Join me in supporting talented investigators through a personal gift to the AGA Research Foundation.
As a member of the GI community, you understand the physical, emotional and financial costs of digestive diseases. And you understand the value of research to advance patient care. The gap in federal funding for research continues to grow. Many well-qualified young investigators cannot get government funding. Gifts to the AGA Research Foundation this year directly supported 52 talented investigators. Despite this success, over 200 other innovative and promising research ideas went unfunded.

That's why I'm asking for your help.
Securing the future of the field is no small task. Every dollar is a step forward in helping to spark the scientific breakthroughs of today so clinicians will have the tools to improve care tomorrow.

Everyone benefits from GI research developed by dedicated investigators.
I invite you to help the AGA Research Foundation continue our efforts to fund and retain talented GI scientists whose research will impact the future care of patients. Donate today at www.gastro.org/donate.

Thank you for your generosity. Best wishes for a happy, healthy holiday season and successful New Year.

ginews@gastro.org

DDSEP 9
Digestive Diseases Self-Education Program

Quick quiz answers

Q1. Correct answer: F

Rationale

There are a number of known risk factors for cholangiocarcinoma including PSC, choledochal cysts, obesity, chronic liver disease, toxins such as Thorotrast as well as liver flukes including those in the *Opisthorchis* and *Clonorchis* genus. While *Fasciola* does infect the liver, an association has not been reported with cholangiocarcinoma.

References

1. Fevery J, et al. Malignancies and mortality in 200 patients with primary sclerosering cholangitis: a long-term single-centre study. Liver Int. 2012;32(2):214-22.

2. Razumilava N, et al. Cancer surveillance in patients with primary sclerosing cholangitis. Hepatology. 2011;54(5): 1842-52.

3. Williamson KD, et al. Primary sclerosing cholangitis: a clinical update. Br Med Bull. 2015;114(1):53-64.

Q2. Correct answer: D

Rationale

HELLP syndrome is a multisystemic disorder that is characterized by the development of hemolytic anemia, elevated liver enzymes, and low platelets. Most cases occur between 28 and 36 weeks of gestation, but it can also develop up to 1 week post partum in 30% of cases.

Reference

Fitzpatrick KE, et al. Risk factors, management, and outcomes of hemolysis, elevated liver enzymes, and low platelets syndrome and elevated liver enzymes, low platelets syndrome. Obstet Gynecol. 2014 Mar;123(3):618-27.

ginews @gastro.org

Data compared across groups

Biologics *from page 1*

as an 8-week induction therapy and a 44-week maintenance therapy in patients with moderate to severe ulcerative colitis (N Engl J Med 2019 Sep 25 doi: 10/1056/NEJMoa1900750). For the phase 3 trial, known as UNIFI, researchers randomly assigned 961 patients to receive an intravenous induction dose of ustekinumab over the course of 8 weeks (320 to a dose of 130 mg and 322 to a weight-range–based dose that approximated 6 mg per kilogram of body weight), while the remaining 319 received placebo. Patients who responded to induction therapy were randomly assigned to a 44-week maintenance phase in which they received subcutaneous maintenance injections of 90 mg of ustekinumab (172 to injections every 12 weeks, 176 to injections every 8 weeks, and 175 to placebo). The primary endpoint for both phases of the trial was clinical remission, defined as a total score of 2 or lower on the Mayo scale, and no subscore greater than 1 on any of the four Mayo scale components.

Dr. Sands and his colleagues found that at week 8 clinical remission was achieved in 15.6% of patients in the 130-mg ustekinumab infusion group, compared with 15.5% in the 6–mg per kg of body weight group, and 5.3% of those in the placebo group. "The percentages of patients who met major secondary endpoints or had histo-endoscopic mucosal healing were significantly higher in both ustekinumab groups than in the placebo group," the researchers wrote. "Through week 8, the median changes from baseline in the IBDQ [Inflammatory Bowel Disease Questionnaire] score were significantly greater in both ustekinumab groups than in the placebo group."


Dr. Sands

Meanwhile, at week 44, clinical remission was achieved in 38.4% of patients in the group receiving 90 mg subcutaneous ustekinumab every 12 weeks, compared with 43.8% of those in the group receiving 90 mg every 8 weeks, and 24% of those in the placebo group. "The percentages of patients with maintenance of clinical response through week 44, endoscopic improvement at week 44, or corticosteroid-free clinical remission (with either definition of clinical remission) at week 44 were significantly higher in both ustekinumab groups than in the placebo group," the researchers wrote.

When they evaluated other endpoints, Dr. Sands and his colleagues observed that improvements in partial Mayo scores and reductions in serum and fecal concentrations of inflammatory biomarkers that occurred with induction were sustained through week 44. "Although our findings suggest that ustekinumab was effective in patients with or without previous treatment failure with biologics for both induction and maintenance therapy, the percentages of patients in whom each endpoint was achieved were lower across groups with previous treatment failure with biologics," they wrote.

In the second study, known as VARSITY, researchers led by Dr. Sands conducted a randomized, phase 3b, head-to-head trial com-

Continued on following page

PERSPECTIVE

Cost-effectiveness of all biologics needs to be evaluated

Long-term rates of colectomy for ulcerative colitis have not declined over a 10-year period, a fact that highlights the need for new biologic therapies and strategies.

Although the VARSITY trial presents a head-to-head comparison of biologics for inflammatory bowel disease and aims to determine the first-line biologic therapy for ulcerative colitis, any clinical superiority of vedolizumab should be balanced against the significant cost advantages of a subcutaneous regimen of adalimumab. In many respects, the ideal trial to assess whether vedolizumab should supplant anti-TNF therapies would involve a head-to-head comparison of infliximab infusions with vedolizumab infusions in patients who have not previously received anti-TNF therapies.

The UNIFI trial assessed the combination of a single induction infusion followed by a maintenance subcutaneous regimen in patients with ulcerative colitis and may lead to the assessment of similar regimens in future trials of biologics in an effort to reduce our dependence on expensive, completely infusion-based biologic regimens, not to mention to relieve pressure on our increasingly busy infusion units. Indeed, the landscape of biologic therapies for ulcerative colitis has changed so dramatically over the past decade with the widespread introduction of less-expensive infliximab and adalimumab biosimilars, as well as vedolizumab, oral Janus kinase inhibitors (tofacitinib), and now ustekinumab, that biologics rather than hospitalization or colectomy are now the main driver of health care costs in the management of inflammatory bowel disease.

The findings in both these trials by Sands et al. highlight the importance of alternative biologic treatments and regimens for ulcerative colitis in patients who are not able to receive anti-TNF therapies because of unacceptable side effects or who have disease that is refractory to anti-TNF therapies. The cost-effectiveness of all biologics will have to come into sharper focus in future trials and longitudinal studies of biologics to help determine not only their eventual place in the treatment algorithm for moderate to severe ulcerative colitis but also the true effect of existing and newer biologics on disease course and rates of colectomy.

This text was extracted from an editorial by Richard J. Farrell, MD, that appeared online Sep. 25, 2019, in The New England Journal of Medicine. Dr. Farrell is with Connolly Hospital and Royal College of Surgeons in Dublin.

Low-FODMAP diet eases gut symptoms in IBD

BY JENNIE SMITH
MDedge News

RIMMA_BONDERENKO/ISTOCK/GETTY IMAGES

A diet low in fermentable carbohydrates can reduce gut symptoms related to inflammatory bowel disease (IBD), according to a study by U.K. researchers.

Fermentable oligosaccharides, disaccharides, monosaccharides, and polyols (FODMAPs) occur in a number of common foods, including certain fruits, vegetables, and dairy products. They can draw increased water to the gut, and through microbial fermentation increase hydrogen in the colon.

While previous research has shown that a low-FODMAP diet can relieve gut symptoms such as swelling and flatulence in people with irritable bowel syndrome, the diet has been little studied in IBD patients, for whom gut symptoms often persist even in the absence of gastrointestinal inflammation. In a study published in Gastroenterology, Selina Cox, MD, of King's College, London, and colleagues randomized 52 people with ulcerative colitis or Crohn's disease with persistent gut symptoms but without active inflammation to 4 weeks on a low-FODMAP diet (n = 27) or a control diet comprising sham dietary advice (n = 25). Investigators were not blinded to treatment allocation.

At 4 weeks, Dr. Cox and her colleagues reported more patients on the low-FODMAP diet reported "adequate" relief of gut symptoms (52% vs. 16%, *P* = .007), and saw slight improvements in health-related quality of life scores, compared with the control group. Patient-reported flatulence and bloating were significantly lower in the treatment group, while few other symptom-specific differences were seen between groups.

Stool samples collected at baseline and at the study's endpoint showed significantly reduced abundance of three types of gut bacteria thought to have a role in immune response – *Bifidobacterium adolescentis*, *B longum*, and *Faecalibacterium prausnitzii* – compared with control subjects. But there were no significant between-group differences in bacterial diversity or in biomarkers of inflammation.

"A major strength of this trial is that low-FODMAP dietary advice was compared to sham dietary advice, providing the first placebo-controlled evidence of effectiveness in IBD," the researchers wrote in their analysis. Weaknesses of the study include its single-blinded design and inability to control for nutritional alterations related to the low-FODMAP diet.

Ms. Cox and her colleagues recommended a 4-week low-FODMAP diet along with "expert advice and intensive follow-up" for the management of gut symptoms in IBD, but cautioned that longer-term use may not be appropriate.

The study was funded by the U.S.-based Kenneth Rainin Foundation. Two of Dr. Cox's coauthors declared financial conflicts of interest from a patent on a mobile application to support the low-FODMAP diet; the study's corresponding author, Kevin Whelan, PhD, additionally reported receiving fees or research support from food and nutrition firms.

ginews@gastro.org

SOURCE: Cox S et al. Gastroenterology. 2019. doi: 10.1053/j.gastro.2019.09.024.

AGA Resource
AGA's patient education can help your patients better understand the low-FODMAP diet. Learn more at https://www.gastro.org/practice-guidance/gi-patient-center/topic/low-fodmap-diet.

Continued from previous page

paring vedolizumab with adalimumab in 769 adults with moderate to severe ulcerative colitis, in an effort to determine if vedolizumab is superior after 52 weeks of treatment (N Engl J Med. 2019 Sep 25. doi: 10/1056/NEJMoa1905725). They assigned patients to receive IV infusions of 300 mg of vedolizumab on day 1 and at weeks 2, 6, 14, 22, 30, 38, and 46 (plus injections of placebo) or subcutaneous injections of 40 mg of adalimumab, with a total dose of 160 mg at week 1, 80 mg at week 2, and 40 mg every 2 weeks thereafter until week 50 (plus infusions of placebo). The primary endpoint was clinical remission, defined as a total score of 2 or lower on the Mayo scale, and no subscore greater than 1 on any of the four Mayo scale components.

At week 52, the researchers found that 31.3% of patients in the vedolizumab group achieved clinical remission, compared with 22.5% of those in the adalimumab group, while a higher percentage of patients in the vedolizumab group demonstrated endoscopic involvement (the first secondary outcome), compared with their counterparts in the adalimumab group (39.7% vs. 27.7%, respectively). Treatment effects were more pronounced in patients who had not previously used a TNF inhibitor.

In contrast, Dr. Sands and colleagues reported that at week 52, corticosteroid-free clinical remission was observed in 12.6% of patients in the vedolizumab group, compared with 21.8% of their counterparts in the adalimumab group. "It is difficult to explain the inconsistency of the results between this secondary remission outcome and the primary remission outcome," they wrote. "The trial did not require a specific schedule for corticosteroid tapering, which can vary among practitioners. However, this limitation should not have resulted in differential effects in the two treatment groups."

They noted that dosing regimens used in VARSITY were based on a conservative approach and use according to U.S. labels. "Real-world studies have shown improved efficacy outcomes after dose intensification in both adalimumab and vedolizumab therapies," they wrote. "Data from ongoing trials of adalimumab (NCT02065622) and vedolizumab (NCT03029143) may further characterize the effect of higher doses on efficacy outcomes."

UNIFI was funded by Janssen Research and Development. Dr. Sands disclosed that the Icahn School of Medicine received an institutional grant from Janssen to conduct the study. VARSITY was funded with support from Takeda. Dr. Sands reported that he received grant support and consulting fees from Takeda. Dr. Sands and coauthors reported having financial ties to many other companies in the pharmaceutical and biotechnology industries.

dbrunk@mdedge.com

SOURCES: Sands BE et al. N Engl J Med. 2019 Sep 25 doi: 10/1056/NEJMoa1900750; N Engl J Med. 2019 Sep 25 doi:.10/1056/NEJMoa1905725.

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

Surgery beats medical therapy in some GERD patients

BY BIANCA NOGRADY
MDedge News

Surgery may be more effective than medical therapy, according to results from a randomized trial in 78 patients with reflux-related heartburn refractory to proton pump inhibitors (PPIs).

Stuart J. Spechler, MD, AGAF, from Baylor University Medical Center, Dallas, and coauthors wrote in the New England Journal of Medicine that, for these patients, there were no medical treatment options that had been shown to have long-term benefit, so PPIs were often continued despite not offering adequate symptom relief. Other medical options such as baclofen and neuromodulators often have unacceptable side effects, and studies of their efficacy were few and of short duration.

In this study, patients were randomized either to laparoscopic Nissen fundoplication, treatment with omeprazole plus baclofen with desipramine depending on symptoms, or a control treatment of omeprazole plus placebo.

At 1 year, researchers saw a significantly higher rate of treatment success – defined as 50% or greater improvement in gastroesophageal reflux disease health-related quality of life score – in the surgery group (67%), compared with the medical treatment group (28%) and control medical group (12%).

This translated to an unadjusted 138% greater chance of treatment success with surgery, compared with active medical treatment, and a greater than 400% increase for surgery, compared with the control medical treatment.

Researchers also did a prespecified subgroup analysis among people with reflex hypersensitivity or abnormal acid reflux, and found the incidence of success with surgery was 71% and 62%, respectively.

They described this finding as "noteworthy," given that reflux hypersensitivity was considered a functional disorder that would not be expected to improve with a procedure that didn't alter abnormal esophageal pain perception.

However, they acknowledged that, as the study did not include a sham-surgery group, they couldn't determine how much the placebo effect might have contributed to the treatment success of surgery.

They also stressed that the randomized group was a highly selected group of patients, and that the systematic work-up including esophageal multichannel intraluminal impedance pH monitoring could identify a subgroup that might have a better response to surgery than to medical treatment.

Four patients in the surgery group experienced a total of five serious adverse events, including one patient who had a herniated fundoplication treated with repeat surgery; four patients in the active medical group experienced four serious adverse events; and three patients in the control medical group experienced five serious adverse events.

The authors noted that 366 patients with PPI-refractory heartburn were originally enrolled in the study, then treated with 20 mg of omeprazole twice daily for 2 weeks with strict instructions to take 20 minutes before breakfast and dinner. Of these patients, 42 had their symptoms relieved by the omeprazole treatment and so were excluded from the randomization.

The "strict instructions" on how to take omeprazole were important, because PPIs bind to gastric proton pumps that are actively secreting acid only, the authors wrote. They also commented that the relative potencies of individual PPIs can vary, so patients not on omeprazole before the study may have responded better to this than other PPIs.

Before randomizations, patients also underwent endoscopy, esophageal biopsy, esophageal manometry, and multichannel intraluminal impedance pH monitoring. This excluded another 23 patients who were found to have non–gastroesophageal reflux disease, including eosinophilic esophagitis, other endoscopic or histologic abnormalities, and manometric abnormalities.

"This trial highlights the critical importance of systematic evaluation, similar to that recommended by Gyawali and Fass for managing the care of patients with PPI-refractory heartburn," they wrote. "Many patients would not complete this rigorous evaluation, and among those who did, the cause of heartburn in most of them was not GERD."

The study was funded by the Department of Veterans Affairs Cooperative Studies Program. Four authors declared consultancies with or grants from the pharmaceutical sector.

ginews@gastro.org

SOURCE: Spechler SJ et al. N Engl J Med. 2019 Oct 16. doi: 10.1056/NEJMoa1811424.

PERSPECTIVE

Surgery for heartburn, but not for all

Around 40% of troublesome heartburn fails to respond to proton pump inhibitor therapy, which may reflect a diverse range of underlying causes of the condition. Therefore we cannot treat it as a single disease process that will respond to higher and higher doses of acid suppression.

The results of a study of surgical intervention in a carefully selected group of patients are striking in showing surgery's superiority to medical treatment, but it is important to note that 79% of patients enrolled in the study did not meet the criteria for surgery. Therefore these findings cannot be generalized to all patients with refractory heartburn, and each case should be considered for surgery only after extended trials of medical therapy.

Nicholas J. Talley, MD, PhD, AGAF, is from the faculty of health and medicine at the University of Newcastle (Australia) and Hunter Medical Research Institute, also in Newcastle. These comments are adapted from an accompanying editorial (N Engl J Med. 2019 Oct 17. doi: 10.1056/NEJMe1911623). Dr. Talley declared a range of consultancies, grants, personal fees, and patents unrelated to the study.

FDA: Sandoz recalls ranitidine capsules with NDMA

BY CHRISTOPHER PALMER
MDedge News

See related story on page 14.

The Food and Drug Administration has alerted health care professionals and patients about a voluntary recall of some prescription ranitidine (Zantac) because of detected N-nitrosodimethylamine (NDMA) levels, according to a news release from the agency.

The recall applies to 14 lots in which NDMA, a probable human carcinogen and nitrosamine impurity formed as a byproduct of several industrial and natural processes, has been detected at levels above those set by the FDA, according to a company announcement on Sept. 23 from Sandoz. According to the announcement, which also specifies the affected lots, the company has not received any reports of adverse events related to use of the products in the recall.

According to the FDA release, so far, only the specified lots of ranitidine are known to be contaminated, and patients can continue taking this stomach acid–reducing histamine$_2$ blocker from lots that are not affected by the recall.

"When we identify lapses in the quality of drugs that pose potential risks for patients, the FDA makes all efforts to understand the issue and provide our best recommendation to the public as quickly and accurately as possible," said acting FDA Commissioner Norman E. Sharpless, MD.

As part of this ongoing investigation, the FDA recently posted a testing protocol for detecting NDMA in ranitidine; the agency hopes regulators and industry will use this protocol to begin their own laboratory testing as well and send samples to the FDA for further testing.

More information about the recall, as well as instructions for patients and health care professionals, can be found in the full news release on the FDA website. The agency also encourages any adverse reactions be reported to its MedWatch program.

cpalmer@mdedge.com

Both POEM approaches equal for achalasia

BY STEVE CIMINO
MDedge News

Despite theoretical preferences for either the anterior or the posterior approach to peroral endoscopic myotomy (POEM) in patients with achalasia, a new study has found no significant difference between the two in regard to clinical success or safety.

"Both approaches are equivalently safe when performed by experienced operators," wrote Mouen A. Khashab, MD, of Johns Hopkins Medicine in Baltimore and coauthors, adding that the most notable difference was "closure was rated as easier during the posterior approach," and fewer clips were needed. The study was published in Gastrointestinal Endoscopy.

To analyze and compare the efficacy of the two POEM approaches, the researchers conducted a multicenter controlled clinical trial of 150 patients with achalasia. They were randomized into two groups: those receiving POEM with the anterior approach (n = 73) or the posterior approach (n = 77). Of those patients, 148 received POEM and 138 completed 1-year follow-up. At 3, 6, and 12 months' follow-up by phone call, patients were evaluated via outcomes that included Eckardt and dysphagia scores, quality of life scales, and gastroesophageal reflux disease questionnaire score.

Technical success was achieved in all 77 patients in the posterior group compared with 71 patients (97.3%) in the anterior group ($P = .23$). Both groups had a median length of hospital stay post procedure of 2 days. Adverse events occurred in seven patients (9%) in the posterior group and in eight patients (11%) in the anterior group ($P = .703$).

Though no significant differences were found between the two groups in time to perform mucosal incision, submucosal tunneling, myotomy, or closure, the median difficulty of closure in the posterior group was lower than in the anterior group ($P = .002$). In addition, fewer clips were needed during closure in the posterior approach.

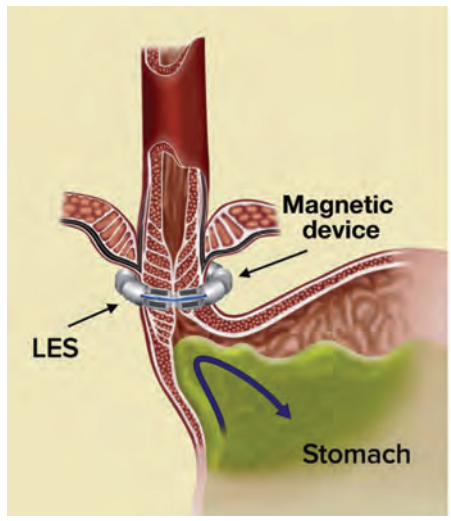
After per-protocol analysis, clinical success at 1 year was achieved in 89% of patients in the posterior group (95% confidence interval, 81%-96%) and 90% of patients in the anterior group (95% CI, 82%-97%). At 1-year follow-up, both

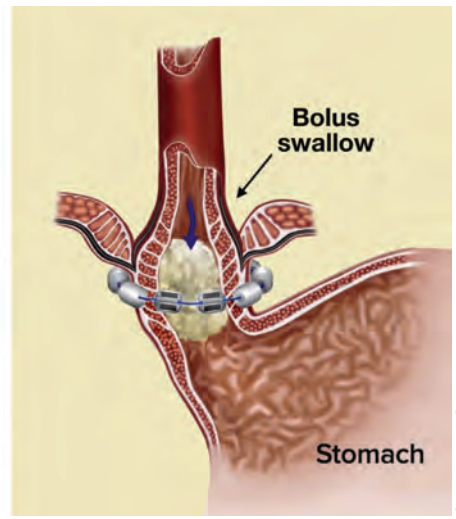
Continued on following page

AGA Resource
The AGA Center for GI Innovation and Technology supports innovation and the development of new technology in gastroenterology, hepatology, nutrition and obesity by guiding medical device and therapeutics innovators through the technology development and adoption process. To learn more, visit www.gastro.org/CGIT.

Magnetic sphincter augmentation controls regurgitation

BY HEIDI SPLETE
MDedge News





Adults with moderate to severe regurgitation showed significant improvement after magnetic sphincter augmentation, compared with increased proton pump inhibitor therapy, based on data from 152 patients.

Proton pump inhibitors (PPIs) are often prescribed for patients with refractory gastroesophageal reflux disease (GERD), but these medications do not address the weakness in the lower esophageal sphincter that often contributes to refractory regurgitative GERD, wrote Reginald Bell, MD, of the Institute of Esophageal and Reflux Surgery in Englewood, Colo., and colleagues.

Magnetic sphincter augmentation (MSA) is "an alternative to fundoplication that uses magnetic attraction from inside a series of titanium beads to augment the weak [lower esophageal sphincter] and reestablish the body's natural barrier to reflux," the researchers wrote.

In the CALIBER study, published in Clinical Gastroenterology and Hepatology, the researchers randomized 102 patients to twice-daily PPI (20 mg omeprazole) and 50 patients to laparoscopic MSA. Treatment was assessed at 6 months, and patients in the PPI group with persistent regurgitation were invited to cross into the MSA group, with 25 patients doing so. The patients were spread across 20 sites and treated between July 2015 and February 2017. Outcomes including regurgitation, foregut scores, esophageal acid exposure, and adverse events were assessed after 1 year.

MSA controlled regurgitation in 72 of 75 patients (96%) at 1 year, while 8 of 43 PPI patients (19%) reported control of regurgitation. In addition, 81% of the MSA patients reported improvement in GERD health-related quality of life, and 91% discontinued daily use of PPIs. Significant numbers of patients in the MSA group reported decreased dysphagia, bloating, and esophageal acid exposure, and 70% had normal pH levels at the end of the study.

No serious perioperative adverse events occurred in either group during the study period; 19 original MSA patients and 10 MSA crossover patients reported dysphagia, but they reported less at 6 months and 12 months, compared with baseline.

The study findings were limited by several factors, including the relatively short follow-up period and the different methods of pH testing at 6 months (transnasal impedance) and at 12 months (telemetry capsule), the researchers noted. However, the results support MSA as an effective option for patients with medically refractory regurgitative GERD that was superior to PPI for controlling regurgitation.

"Regurgitation and associated heartburn symptoms responded to MSA even when completely nonresponsive to PPI therapy, in line with the mechanical, volume origin of regurgitative symptoms," they concluded.

Dr. Bell and several coauthors disclosed honoraria from Ethicon for teaching services. The study was supported in part by Ethicon.

ginews@gastro.org

SOURCE: Bell R et al. Clin Gastroenterol Hepatol. 2019. doi: 10.1016/j.cgh.2019.08.056.

Continued from previous page

groups had an Eckardt score of 0 ($P = .994$) and their median gastroesophageal reflux disease score was 6 ($P = .73$). All patients who completed quality of life questionnaires reported improvements, with a median change in pain of 23 in the anterior group and 34 in the posterior group ($P = .49$). The posterior group also reported a greater median change in social functioning (50 vs. 38; $P = .02$).

The authors noted their study's potential limitations, including relying on the Eckardt scoring system – one that was recently questioned in terms of validity – to determine clinical success. However, they also offered an argument in favor of clinical scoring because of "the importance of symptom improvement from the patient perspective." Also, because of the lack of prestudy data comparing the anterior and posterior approaches, they chose 15% as the noninferiority margin for clinical efficacy, which could be regarded as a limitation as well.

Four of the authors reported potential conflicts of interest, including serving as consultants for various medical companies, serving on medical advisory boards, and receiving research support and personal fees. The other authors reported no conflicts of interest.

ginews@gastro.org

SOURCE: Khashab MA et al. Gastrointest Endosc. 2019 Aug 10. doi: 10.1016/j.gie.2019.07.034.

Updated consensus recommendations on management of acute upper GI bleeding

BY BIANCA NOGRADY
MDedge News

Guidelines on the management of acute upper gastrointestinal bleeding (UGIB) have been updated, including recommendations on managing patients on antiplatelet or anticoagulant therapy and on use of endoscopy and new therapeutic approaches.

Writing in Annals of Internal Medicine, an international group of experts published an update to the 2010 International Consensus Recommendations on the Management of Patients With Nonvariceal Upper Gastrointestinal Bleeding, with a focus on resuscitation and risk assessment; pre-endoscopic, endoscopic, and pharmacologic management; and secondary prophylaxis.

Alan N. Barkun, MDCM, MSc, AGAF, from McGill University, Montreal, and coauthors first recommended that fluid resuscitation should be initiated in patients with acute UGIB and hemodynamic instability to avoid hemorrhagic shock and restore end-organ perfusion and tissue oxygenation while the bleeding is brought under control.

They acknowledged the uncertainty around whether colloid or crystalloid fluid should be used, but suggested routine use of colloids was not justified because they were more expensive and did not appear to increase survival.

On the question of whether the resuscitation should be aggressive or restrictive in its timing and rate, the group said there was not enough evidence to support a recommendation on this. "The important issue in patients with hemorrhagic shock due to trauma or UGIB is to stop the bleeding while minimizing hemodynamic compromise," they wrote.

They also advised blood transfusions in patients with a hemoglobin level below 80 g/L who did not have underlying cardiovascular disease, but suggested a higher hemoglobin threshold for those with underlying cardiovascular disease.

The second recommendation was that patients with a Glasgow Blatchford score of 1 or less were at very low risk for rebleeding and mortality, and these patients may therefore not need hospitalization or inpatient endoscopy. They advised against using the AIMS65 prognostic score for this purpose because it was designed to identify patients at high risk of death, not those at low risk for safe discharge.

In regard to endoscopic management, they

Continued on page 32

Dupilumab may reduce dysphagia in adults with eosinophilic esophagitis

BY ANDREW D. BOWSER
MDedge News

Dupilumab (Dupixent) significantly reduced patient-reported dysphagia among adults with eosinophilic esophagitis enrolled in a randomized trial, investigators reported.

Treatment with this monoclonal antibody also improved histologic disease features and abnormal endoscopic features, compared with placebo, according to investigators in the phase 2 trial, which included 47 patients enrolled at 14 U.S. study sites.

Injection-site erythema and nasopharyngitis were more common among dupilumab-treated versus placebo-treated patients, and there were no serious adverse events or deaths observed, according to cofirst authors Ikuo Hirano, MD, AGAF, of Northwestern University, Chicago, and Evan S. Dellon, MD, MPH, of the University of North Carolina at Chapel Hill.

"Dupilumab is the first targeted biologic agent to improve dysphagia, histologic and endoscopic measures of disease, as well as esophageal function, and have an acceptable safety profile in adult patients with active eosinophilic esophagitis," said Dr. Hirano and Dr. Dellon and associates in the journal Gastroenterology.

The report on the phase 2 trial included 47 adults with active eosinophilic esophagitis randomized to weekly subcutaneous injections of dupilumab at a dose of 300 mg or placebo. All participants had a score of 5 or higher on the Straumann Dysphagia Instrument (SDI), a patient-reported outcome measure.

Change in SDI score from baseline to week 10, the study primary endpoint, was significantly improved for dupilumab, according to investigators, who reported a least-squares mean change of –3.0 from baseline, versus –1.3 for placebo ($P = .0304$).

Treatment with this monoclonal antibody also improved histologic disease features and abnormal endoscopic features, compared with placebo.

The original plan was to measure dupilumab's effect on SDI out to week 12 of treatment, but because of technical problems with an electronic diary system used in the trial, there was significant data loss, and this primary endpoint was instead evaluated at week 10, investigators said in their report.

Improvements in SDI scores were apparent as early as week 1 after dupilumab treatment started, they added, noting that 39% of dupilumab-treated patients had an improvement in SDI score of at least 3, compared with just 13% of placebo-treated patients ($P = .490$).

Dupilumab also improved outcomes measured by the eosinophilic esophagitis histology scoring system (EoE-HSS), including a 68.3% improvement in severity and 54.6% in extent of disease from baseline to week 12, investigators said.

Likewise, dupilumab improved endoscopic outcomes at week 12 as measured by the eosinophilic esophagitis Endoscopic Reference Score (EREFS), and improved esophageal distensibility plateau, a measure of esophageal function, by 18%, compared with placebo, according to the report.

The Food and Drug Administration has approved dupilumab for use in atopic dermatitis, asthma, and chronic rhinosinusitis with nasal polyposis, and has granted orphan drug designation for its use in the treatment of eosinophilic esophagitis, according to Sanofi and Regeneron Pharmaceuticals.

Dupilumab antagonizes the interleukin (IL)–4 receptor-alpha component of the type 2 receptor, thereby inhibiting signaling of IL-4 and IL-13, the investigators noted in their report.

"These results demonstrate that interleukin-4 and interleukin-13 are central pathological mediators of esophageal inflammation and dysfunction in adult patients with active eosinophilic esophagitis," said investigators in their report.

AGA Resource
AGA patient education on eosinophilic esophagitis can help your patients better understand the condition. Visit https://www.gastro.org/practice-guidance/gi-patient-center/topic/eosinophilic-esophagitis-eoe.

The anti-IgE monoclonal antibody omalizumab (Xolair) failed to improve dysphagia and histologic features of eosinophilic esophagitis, suggesting the pathogenesis of this disease is not mediated by IgE, they added.

A number of other targeted biologic agents, including the anti–IL-5 agents mepolizumab and reslizumab, have failed to significantly improve dysphagia versus placebo in patients with eosinophilic esophagitis, they added.

The research was sponsored by Sanofi and Regeneron. Several study coauthors indicated that they were current or former employees of those companies. Other study authors provided disclosures related to Adare, Allakos, Banner, Calypso, Enumeral, EsoCap, GlaxoSmithKline, Meritage, Regeneron, Robarts, and Shire, among others.

ginews@gastro.org

SOURCE: Hirano I et al. Gastroenterology. 2019 Oct 5. doi: 10.1053/j.gastro.2019.09.042.

Continued from page 29

advocated that all patients with acute UGIB – whether low or high risk – undergo endoscopy within 24 hours of presentation. This was even more urgent in patients being treated with anticoagulants. "Because of the recognized benefits of early endoscopy, coagulopathy should be treated as necessary but endoscopy should not be delayed," they wrote.

Patients with acutely bleeding ulcers with high-risk stigmata should undergo endoscopic therapy preferably with thermocoagulation or sclerosant injection, or with hemoclips depending on the bleeding location and patient characteristics.

The group also included two conditional recommendations, based on very-low-quality evidence, that patients with actively bleeding ulcers receive TC-325 hemostatic powder as temporizing therapy to stop the bleeding if conventional endoscopic therapies aren't available or fail. However, they stressed that TC-325 should not be used as a single therapeutic strategy.

Because of a lack of efficacy data and low availability of expertise in the technology, the authors said they could not make a recommendation for or against using a Doppler endoscopic probe (DEP) to assess the need for further endoscopic therapy.

The guidelines also addressed the issue of pharmacologic management of acute UGIB. They strongly recommended that patients with bleeding ulcers and high-risk stigmata who have undergone successful endoscopic therapy should then receive an intravenous loading dose of proton pump inhibitor (PPI) therapy, followed by continuous intravenous infusion.

"Cost-effectiveness studies have suggested that high-dose intravenous PPIs after successful endoscopic hemostasis improve outcomes at a modest cost increase relative to non–high-dose intravenous or oral PPI strategies," they wrote.

A second conditional recommendation, based on very-low-quality evidence, was that patients with a bleeding ulcer who were at high risk for rebleeding be also treated twice-daily with oral PPIs for 2 weeks, then once-daily. They also recommended patients on cardiovascular prophylaxis with single- or dual-antiplatelet therapy or anticoagulant therapy be given PPIs.

"The consensus group concluded that, for high-risk patients with an ongoing need for anticoagulants, the evidence suggests that the benefits of secondary prophylaxis outweigh the risks."

The group was supported by a grant from CIHR Institute of Nutrition, Metabolism and Diabetes and from the Saudi Gastroenterology Association. Nine authors declared grants, personal fees, honoraria and other funding from the pharmaceutical and medical device sector outside the submitted work. No other conflicts of interest were declared.

ginews@gastro.org

SOURCE: Barkun AN et al. Ann Intern Med. 2019 Oct. 22. doi: 10.7326/M19-1795.

Risk assessment is key

CRC screening *from page 1*

States. Follow-up ranged from 0 to 19.5 years for colorectal cancer incidence and up to 30 years for mortality.

Because of the dearth of relevant data in some studies, however, the projected outcomes had to be simulated, with benefits and harms calculations based on 100% screening adherence. However, the team noted, it's impossible to achieve complete adherence. Most studies of colorectal screening don't exceed a 50% adherence level.

"All the modeling data are of low certainty. It is a useful indication, but there is a high chance that new evidence will show a smaller or larger benefit, which in turn may alter these recommendations."

Compared with no screening, all four screening models reduced the risk of colorectal cancer mortality to a similar level.

- FIT every year, 59%.
- FIT every 2 years, 50%.
- Single sigmoidoscopy, 52%.
- Single colonoscopy, 67%.

Screening had less of an impact on reducing the incidence of colorectal cancer:

- FIT every 2 years, 0.05%.
- FIT every year, 0.15%.
- Single sigmoidoscopy, 27%.
- Single colonoscopy, 34%.

The panel also assessed potential harms. Among almost 1 million patients, the colonoscopy-related mortality rate was 0.03 per 1,000 procedures. The perforation rate was 0.8 per 1,000 colonoscopies after a positive fecal test, and 1.4 per 1,000 screened with sigmoidoscopy. The bleeding rate was 1.9 per 1,000 colonoscopies performed after a positive fecal test, and 3-4 per 1,000 screened with sigmoidoscopy.

Successful implementation of these recommendations hinges on accurate risk assessment, however. The team recommended the QCancer platform as "one of the best performing models for both men and women."

The calculator includes age, sex, ethnicity, smoking status, alcohol use, family history of gastrointestinal cancer, personal history of other cancers, diabetes, ulcerative colitis, colonic polyps, and body mass index.

"We suggest this model because it is available as an online calculator; includes only risk factors available in routine health care; has been validated in a population separate from the derivation population; has reasonable discriminatory ability; and has a good fit between predicted and observed outcomes. In addition, it is the only online risk calculator we know of that predicts risk over a 15-year time horizon."

The team stressed that their recommendations can't be applied to all patients. Because evidence for both screening recommendations was weak – largely because of the dearth of supporting data – patients and physicians should work together to create a person-

Continued on following page

Successful implementation of these recommendations hinges on accurate risk assessment, however. The team recommended the QCancer platform as 'one of the best performing models for both men and women.'

Continued from previous page

alized screening plan.

"Several factors influence individuals' decisions whether to be screened, even when they are presented with the same information," the authors said. These include variation in an individual's values and preferences, a close balance of benefits versus harms and burdens, and personal preference.

"Some individuals may value a minimally invasive test such as FIT, and the possibility of invasive screening with colonoscopy might put them off screening altogether. Those who most value preventing colorectal cancer or avoiding repeated testing are likely to choose sigmoidoscopy or colonoscopy."

The authors had no financial conflicts of interest.

ginews@gastro.org

SOURCE: Helsingen LM et al. BMJ. 2019;367:l5515. doi: 10.1136/bmj.l5515.

PERSPECTIVE

Current models that predict risk lack precision

There is compelling evidence that CRC screening of average-risk individuals is effective – screening with one of several modalities can reduce CRC incidence and mortality in average-risk individuals. Various guidelines throughout the world have recommended screening, usually beginning at age 50 years, in a one-size-fits-all manner. Despite our knowledge that different people have a different lifetime risk of CRC, no prior guidelines have suggested that risk stratification be built into the decision making.

Dr. Lieberman

A new clinical practice guideline from an international panel applies principles of precision medicine to CRC screening and proposes a paradigm shift by recommending screening to higher-risk individuals, and not recommending screening if the risk of CRC is low. Intuitively, this makes sense and conserves resources – if we can accurately determine risk of CRC. This guideline uses a calculator (QCancer) derived from United Kingdom data to estimate 15-year risk of CRC. The panel suggests that for screening to be initiated there should be a certain level of benefit: a CRC mortality or incidence reduction of 5 per 1,000 screenees for a noninvasive test like fecal immunochemical test (FIT) and a reduction of 10 per 1,000 screenees for invasive tests like sigmoidoscopy and colonoscopy. When these estimates of benefit are placed into a microsimulation model, the cutoff for recommending screening is a 3% risk of CRC over the next 15 years. This approach would largely eliminate any screening before age 60 years, based on the calculator rating, unless there is a family history of GI cancer.

All of the recommendations in this practice guideline are weak because they are derived from models that lack adequate precision. Nevertheless, the authors have proposed a new approach to CRC screening, similar to management plans for patients with cardiovascular disease. Before adopting such an approach, we need to be more comfortable with the precision of the risk estimates. These estimates, derived entirely from demographic and clinical information, may be enhanced by genomic data to achieve more precision. Further data on the willingness of the public to accept no screening, if their risk is below a certain threshold, need to be evaluated. Despite these issues, the guideline presents a provocative approach which demands our attention.

David Lieberman, MD, AGAF, is professor of medicine and chief of the division of gastroenterology and hepatology, Oregon Health & Science University, Portland. He is Past President of the AGA Institute.

CLINICAL CHALLENGES AND IMAGES

What is your diagnosis?

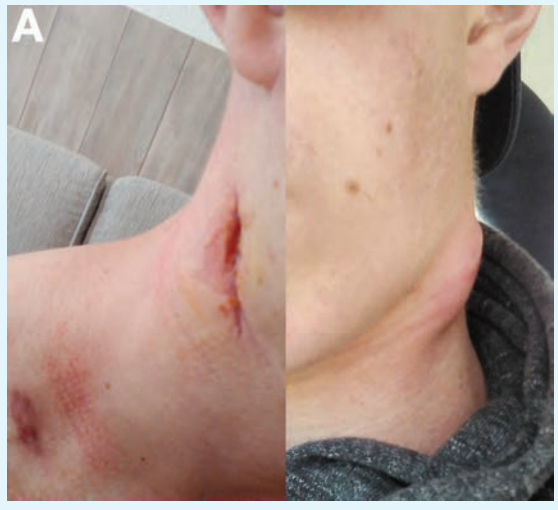
By Antoine Debourdeau, MD, Anne Bozon, MD, and Romain Altwegg, MD. Published previously in Gastroenterology (2018;154[6]:1584-5).

An 18-year-old man presented with feverish cervical swelling that had developed over a few weeks.

He had a prior history of severe Crohn's disease with perianal manifestation with spontaneous perforation and had required an ileocecal and jejunal resection 3 years earlier. Clinical remission was achieved after 1 year of combination therapy by infliximab and azathioprine, followed by infliximab alone.

Physical examination showed an elevated body temperature of 38.5°C, and cervical palpation identified three painful erythematous nodes (3 cm in the left level IIb; 1 cm in the right IIb; 1 cm right supraclavicular space; Figure A). The rest of the examination was normal, and he did not complain about his bowel movements. He stated that he had not been traveling recently, nor had he been in contact with any sick person.

Laboratory tests spotted elevated levels of C-reactive protein (95.5 mg/L). Interferon-gamma release assays QuantiFERON-TB Gold was normal. Fine-needle aspiration showed a purulent content with repeated bacteriologic culture and Gram stain culture, both of which were negative. Specific culture and polymerase chain reaction for *Mycobacterium tuberculosis* were negative as well.



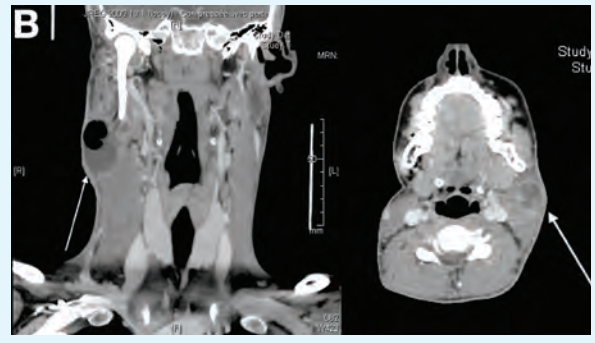
On computed tomography scan, the lymphadenitis showed liquid content with peripheral enhancement. One had an air–fluid level because of a spontaneous fistulization (Figure B). There were neither pulmonary abnormalities, mediastinal adenopathy, nor signs of Crohn's disease activity.

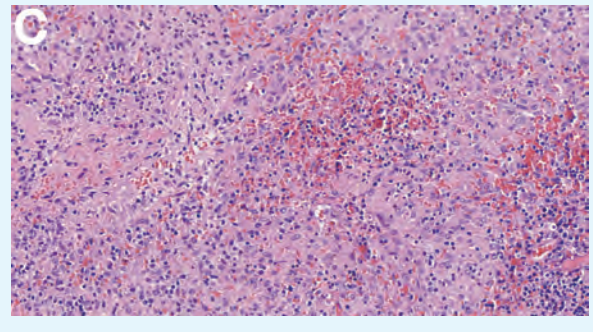
Histologic analysis of a lymph node excision showed epithelioid cell granuloma with noncaseous necrosis (Figures C, D).

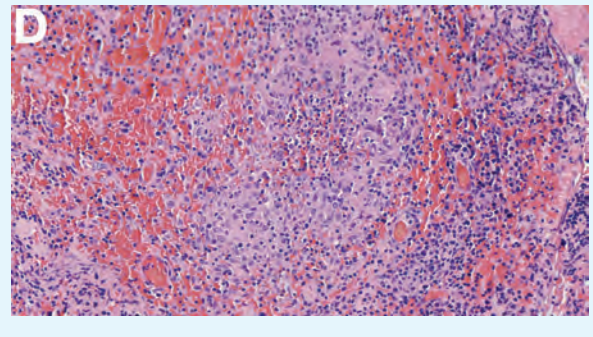
Because the patient underwent anti–tumor necrosis factor–alpha therapy and despite the negative specific testing for tuberculosis, he was treated with probabilistic antituberculosis drugs for 6 months. Treatment proved ineffective and the patient's condition evolved with further fistulization and node size increase.

With the patient's medical history and evolution, what treatment should we consider, and what is the diagnosis?

The diagnosis is on page 47.







AGA Institute

WWW.GIHEPNEWS.COM

GI & HEPATOLOGY NEWS

THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

Management of the hospitalized UC patient: A primer for the initial approach to care by the gastroenterologist

BY ADEETI CHIPLUNKER MD, MMS, AND CHRISTINA HA, MD, AGAF

Dr. Chiplunker is an advanced inflammatory bowel disease fellow and Dr. Ha is associate professor of medicine at the Inflammatory Bowel Disease Center at Cedars-Sinai Medical Center, Los Angeles.

Introduction

Inpatient management of acute ulcerative colitis (UC) flares can be challenging because of the multiple patient and disease-related factors influencing therapeutic decision making. The clinical course during the first 24-72 hours of the hospitalization will likely guide the decision between rescue medical and surgical therapy. Using available evidence from clinical practice guidelines, we present a day-by-day guide to managing most hospitalized UC patients.

Day 0 – The emergency department

When an UC patient presents to the ED for evaluation, the initial assessments should focus on the acuity and severity of the flare. Key clinical features of disease severity include the presence of fever, tachycardia, hypotension, or weight loss in addition to worsened gastrointestinal symptoms of stool frequency relative to baseline, rectal bleeding, and abdominal pain. Acute severe ulcerative colitis (ASUC) is often defined using the modified Truelove and Witts criteria.[1] A patient meets criteria for ASUC if they have at least six bloody stools per day and at least one sign of systemic toxicity, such as heart rate greater than 90 bpm, temperature at or above 37.8° C, hemoglobin level below 10.5 g/dL, or elevated inflammatory markers.

Initial laboratory assessments should include complete blood counts to identify anemia, potential superimposed infection, or toxicity and a comprehensive metabolic profile to evaluate for dehydration, electrolyte abnormalities, hepatic injury, or hypoalbuminemia (an important predictor of surgery), as well as assessment of response to treatment and readmission.[2,3] An evaluation at admission of C-reactive protein (CRP) is crucial because changes from the initial value will determine steroid response and predict need for surgical intervention or rescue therapy. A baseline fecal calprotectin can serve as a noninvasive marker that can be followed after discharge to monitor response to therapy.

Clostridioides difficile infection (CDI) must be ruled out in all patients presenting with ASUC regardless of history of antibiotic use or prior negative testing. Concomitant UC and CDI are associated with a four- to sixfold increased risk of in-hospital mortality and a two- to sixfold increased risk of bowel surgery.[4-6] Immunoassay testing is inexpensive and fast with a high specificity but has low sensitivity; nucleic acid amplification testing with polymerase chain reaction has a high sensitivity and specificity.[7] Knowing which testing algorithm the hospital lab uses helps guide interpretation of results.

For patients meeting criteria for ASUC, obtaining at least an abdominal x-ray is important to assess for colonic dilation to further stratify the patient by risk. Colonic dilation, defined as a transverse colon diameter greater than 5.5 cm, places the patient in the category of fulminant colitis and colorectal surgical consultation should be obtained.[8] A CT scan is often ordered first because it can provide a rapid assessment of intra-abdominal processes but is not routinely needed unless hemodynamic instability, an acute abdomen, or markedly abnormal laboratory testing (specifically white blood cell count with bandemia) is present as these can be indicators of toxic megacolon or perforation.[8-10]

Day 1 – Assessment of disease severity and team assembly

Obtaining a thorough clinical history is essential to classify disease severity and identify potential triggers for the acute exacerbation. Potential triggers may include infections, new medications, recent antibiotic use, recent travel, sick contacts, or cessation of treatments. Standard questions include asking about the timing of onset of symptoms, bowel movements during a 24-hour period, and particularly the presence of nocturnal bowel movements. If patients report bloody stools, inquire how often they see blood relative to the total number of bowel movements. The presence and nature of abdominal pain should be elicited, particularly changes in abdominal pain and comparison with previous disease flares. These clinical parameters are used to assess response to treatment; therefore, ask patients to keep a log of their stool frequency, consistency, rectal urgency, and bleeding each day to report to the team during daily rounds.

For patients with ASUC, a full colonoscopy is rarely indicated in the inpatient setting because it is unlikely to change management and poses a risk of perforation.[11]

Dr. Rao

Acute severe ulcerative colitis (ASUC) is a potentially life-threatening condition which can be a formidable clinical challenge, requiring prompt recognition and multidisciplinary care. As it can be associated with significant morbidity in a population which is often otherwise young and healthy, decisions early in the course of management have the potential to significantly impact the patient's clinical course. Given the recent expansion of therapies available in the management of ulcerative colitis, understanding the complication risk as well as the basic management of ASUC is of paramount importance.

The In Focus article for this quarter, which is brought to you by *The New Gastroenterologist*, sheds light on the inpatient management of ASUC, written by Dr. Adeeti Chiplunker and Dr. Christina Ha (Cedars-Sinai). The article provides a helpful day-by-day breakdown of clinical assessment, addresses the utility of types of diagnostic testing, reviews existing guidelines, as well as therapeutic options as the hospitalization progresses. As ASUC is one of the most common medical emergencies within gastroenterology, it is a valuable read for trainees and established gastroenterologists alike.

Vijaya L. Rao, MD
Editor in Chief,
The New Gastroenterologist

However, a sigmoidoscopy within the first 24 hours of admission will provide useful information about the endoscopic disease activity, particularly if features such as deep or well-like ulcers, large mucosal abrasions, or extensive loss of the mucosal layer are present because these are predictors of colectomy.[8] Tissue biopsies can exclude cytomegalovirus (CMV) infection, an important consideration for patients on immunosuppression including corticosteroids.[12-16]

Venous thromboembolism (VTE) prophylaxis is extremely important for hospitalized inflammatory bowel disease (IBD) patients. At baseline, IBD patients have a threefold higher risk of VTE than do non-IBD patients, which increases to approximately sixfold during flares.[17] Pharmacologic VTE prophylaxis is recommended for all hospitalized IBD patients, even those with rectal bleeding. This may seem counterintuitive in the setting of "GI bleeding," so it is important to counsel both patients and team members regarding VTE risks and the role of the prophylactic regimen to ensure adherence. Mechanical VTE prophylaxis can be used in patients with severe bleeding and hemodynamic instability until pharmacologic VTE prophylaxis can be safely initiated.[17]

Narcotics should be used sparingly for hospitalized IBD patients. Narcotic use is associated with greater likelihood of subsequent IBD hospitalizations, ED visits, and higher costs of health care for patients with IBD.[18] Heavy use of opiates, defined as continuous use for more than 30 days at a dose exceeding 50 mg morphine per day or equivalent, was strongly associated with an increased overall mortality in IBD patients.[19] Opiates also slow bowel motility and precipitate toxic megacolon, along with any other agent that slows bowel motility, such as anticholinergic medications.[8] These agents may also mask bowel frequency symptoms that would otherwise indicate a failure of medical therapy. Similarly, use of NSAIDS should also be avoided because these have been associated with disease relapse and escalating intestinal inflammation.[20]

Once disease severity has been determined, intravenous corticosteroid therapy may be initiated, ideally once CDI and CMV have been excluded. The recommended dosing of intravenous corticosteroids is methylprednisolone 20 mg IV every 8 hours or equivalent. There is no evidence to support additional benefit for doses exceeding these amounts.[8] Prior to starting parenteral corticosteroids, it is important to keep in mind the possible need for rescue therapy during the admission. Recommended testing includes hepatitis B surface antigen and antibody, hepatitis B core antibody, and tuberculosis testing if there is no documented negative testing within the past 6-12 months. These labs should be drawn prior to steroid treatment to avoid delays in care and indeterminate results. Finally, a lipid profile is recommended for patients who may be cyclosporine candidates pending response to intravenous corticosteroids.

Unless the patient has been admitted with a bowel obstruction, which should raise the suspicion that the diagnosis is actually Crohn's disease, enteral feeding is preferred for UC patients even if they may have significant food aversion. The early involvement of a registered dietitian is valuable to guide dietary choices and recommend appropriate enteral nutrition supplements. During acute flares, patients may find a low-residue diet to be less stimulating to their gut while their acute flare is being treated. Electrolyte abnormalities should be repleted and consistently monitored during the hospitalization. Providing parenteral intravenous iron for anemic patients will expedite correction of the anemia alongside treatment of the underlying UC.

Most UC patients admitted to the hospital will require a multidisciplinary approach with gastroenterologists, surgeons, radiologists, dietitians, and case coordinators/social workers, among others. It is essential to assemble the team, especially the surgeons, earlier during the hospitalization rather than later. It is especially important to discuss the role of the surgeon in the management of UC and explain why the surgeon is being consulted in the context of the patient's acute presentation. Being transparent about the parameters the GI team are monitoring to determine if and when surgery is the most appropriate and safe approach will improve patients' acceptance of the surgical team's role in their care. Specific indications for surgery in ASUC include toxic megacolon, colonic perforation, severe refractory hemorrhage, and failure to respond to medical therapy (Table 1).[8]

Table 1. Management guide for hospital admission days 0 and 1

Day 0 Emergency Dept.	**Priority – assessment of acute symptoms, initial diagnostic testing** • Clinical exam: Fever, hemodynamics, weight, abdominal exam • Labs: CBC, CMP, C-reactive protein • Stool testing: CDI, fecal calprotectin • Imaging: Abdominal x-ray, CT abdomen/pelvis if unstable
Hospital Day 1	**Priority – assess disease severity, pretreatment testing** • Pretreatment Labs: TB testing, Hepatitis B (surface antibody, surface antigen, core antibody), TPMT testing, lipid profile • Daily labs: CBC, CMP, C-reactive protein • Endoscopy: Sigmoidoscopy +/– biopsies to r/o CMV infection • Medications: Methylprednisolone 20 mg IV every 8 hours (or equivalent) • Consults: Colorectal surgery, registered dietitian • Diet: oral or enteral feeding, no parenteral nutrition • Supportive care: DVT prophylaxis, minimize narcotics, IV iron

Day 3 – Assessment of response to corticosteroids

In addition to daily symptom assessments, a careful abdominal exam should be performed every day with the understanding that steroids (and also narcotics) may mask perforation or pain. Any abrupt decrease or cessation of bowel movements, increasing abdominal distention, or a sudden increase in abdominal pain or tenderness may require abdominal imaging to ensure no interim perforation or severe colonic dilation has occurred while receiving steroid therapy. In these circumstances, the addition of broad spectrum intravenous antibiotics should be considered, particularly if hemodynamic instability (such as tachycardia) is present.

Patients should be assessed for response to intravenous steroid therapy after 3 days of treatment. A meaningful response to corticosteroids is present if the patient has had more than 50% improvement in symptoms, particularly rectal bleeding and stool frequency. A more than 75% improvement in CRP should also be noted from admission to day 3 with an overall trend of improvement.[2,21] Additionally, patients should be afebrile, require minimal to no narcotic usage, tolerate oral intake, and be ambulatory. If the patient has met all these parameters, it is reasonable to transition to oral corticosteroids, such as prednisone 40-60 mg daily after a course of 3-5 days of intravenous corticosteroids. Ideally, patients should be observed for 24-48 hours in the hospital after transitioning to oral corticosteroids to make sure that symptoms do not worsen with the switch.

Patients with more than eight bowel movements per day, CRP greater than 4.5 g/dL, deep ulcers on endoscopy, or albumin less than 3.0 g/dL have a higher likelihood of failing intravenous corticosteroid therapy, and these patients should be prepared for rescue therapy.[2,21] A patient has failed intravenous corticosteroids by day 3 if they have sustained fever in the absence of an infection, continued CRP elevation or lack of CRP decrease, or ongoing high stool frequency, bleeding, and pain with less than 50% improvement from baseline on admission.[8] In the setting of nonresponse to intravenous corticosteroids, it is prudent to involve colorectal surgery to discuss colectomy as an option of equal merit to medical salvage therapies such as infliximab or cyclosporine.

Infliximab is the most readily available rescue therapy for steroid-refractory patients and has been shown to increase colectomy-free survival in patients with ASUC.[8] However, patients with the same predictors for intravenous steroid failures (low albumin, high CRP, and/or deep ulcers on endoscopy) are also at the highest risk for infliximab nonresponse. These factors are important to discuss with the patients and colorectal surgery teams when providing the options of treatment strategy, particularly with medication dosing. ASUC with more severe disease biochemically (low albumin, elevated CRP, possibly bandemia) benefit from a higher dose of infliximab at 10 mg/kg, given the likelihood of increased drug clearance in this situation.[22,23]

From a practical standpoint, it is important to confirm the patient's insurance status prior to medication administration to make sure therapy can be continued after hospital discharge. Early involvement of the social workers and case coordinators is key to ensuring timely administration of the next dose of treatment. Patients who receive infliximab rescue therapy should be monitored for an additional 1-2 days after administration to ensure they are responding to this therapy with continued monitoring of CRP and symptoms during this period. If there is no response at this point, an additional dose of infliximab may be

Continued on page 45

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE

Continued from page 41

considered but surgery should not be delayed if there is no meaningful response after the first dose.

Another option for intravenous corticosteroid nonresponders is intravenous cyclosporine because treatment failure rates for cyclosporine and infliximab were similar in head-to-head studies.[24] However, patient selection is key to successful utilization of this agent. Unlike infliximab, cyclosporine is primarily an induction agent for steroid nonresponders rather than a maintenance strategy. Therefore, in patients in whom cyclosporine is being considered, thiopurines or vedolizumab are potential options for maintenance therapy. If the patient has poor renal function, low cholesterol, advanced age, significant comorbidities, or a history of nonadherence to therapy, cyclosporine should not be given. Additionally, clinical experience with intravenous cyclosporine administration and monitoring both during inpatient and outpatient care settings should be factored into the decision making for infliximab versus cyclosporine.[8]

Day 5 and beyond – Discharge planning

Patients who have responded to the initial intravenous steroid course by hospital day 5 should have successfully transitioned to oral steroids with plans to start an appropriate steroid-sparing therapy shortly after discharge. Treatment planning should commence prior to discharge and should be communicated with the outpatient GI team to ensure a smooth transition to the ambulatory care setting, primarily to begin insurance authorizations as soon as possible. If the patient has had a meaningful response to infliximab rescue therapy (improvement by more than 50% in bowel frequency, amount of blood, abdominal pain), discharge planning needs to prioritize obtaining authorization for the second dose within 2 weeks of the initial infusion. These patients are high risk for readmission, and close outpatient follow-up by the ambulatory GI care team is necessary to help direct the tapering of steroids and monitor response to treatment.

If the patient has not responded to intravenous steroid therapy, infliximab, or cyclosporine by day 5-7, then surgery should be strongly considered. Delaying surgery may worsen outcomes as patients become more malnourished, anemic, and continue to receive intravenous steroids. Additional preoperative optimization may be required depending on the patient's course up to this point (Table 2).

Table 2. Management guide for hospital admission days 3 and 5

Hospital Day 3	**Priority – assessment response to IV steroids, rescue strategy needed?** • Clinical exam: Fever, hemodynamics, changes in stool frequency, rectal bleeding, abdominal distention or pain • Labs: C-reactive protein decreasing? Hypoalbuminemia present? WBC increasing? • Imaging: Abdominal x-ray, CT abdomen/pelvis if unstable • Medications: ¤ IV steroid responders → continue IV steroids for 3-5 days, then transition to oral prednisone 40-60 mg or equivalent ¤ IV steroid nonresponders • Infliximab • Cyclosporine • Surgery • Consults: Colorectal surgery, registered dietitian, social worker/case coordinator • Diet: Oral or enteral nutrition • Supportive care: DVT prophylaxis, minimize narcotics, IV iron
Hospital Day 5 and beyond	**Priority – discharge planning** Medication responder → Care coordination with outpatient GI team • Obtain authorizations for timely administration of medications • Outpatient follow-up every 4-12 weeks: high risk patient population • Objective assessments for response (calprotectin, endoscopy) Postsurgical patient → Care coordination for outpatient services • Ostomy supplies, home health services • Outpatient surgical and GI follow-up

Summary

The cornerstones of inpatient UC management center on a thorough initial evaluation including imaging and endoscopy as appropriate, establishment of baseline parameters, and daily assessment of response to therapy through a combination of patient-reported outcomes and biomarkers of inflammation. With this strategy in mind, practitioners and care teams can manage these complex patients using a consistent strategy focusing on multidisciplinary, evidence-based care.

See references at www.mdedge.com/gihepnews/new-gastroenterologist.

Surveillance for hepatobiliary cancers in primary sclerosing cholangitis

BY BIANCA NOGRADY
MDedge News

All adult patients with primary sclerosing cholangitis should be screened at least annually for cholangiocarcinoma and gallbladder cancer, particularly in the first year after their diagnosis, according to a clinical practice update published in Clinical Gastroenterology and Hepatology.

Individuals with primary sclerosing cholangitis have a 400-fold higher risk of cholangiocarcinoma, compared with the general population, and around one-third of cancers are detected within 1 year of the cholangitis diagnosis, Christopher L. Bowlus, MD, AGAF, of the University of California, Davis, and coauthors wrote.

The clinical update from the American Gastroenterological Association was in response to the observation that, while there is significant evidence for an increasing incidence of cirrhosis, hepatic decompensation, hepatocellular carcinoma, and liver transplant listing among patients with primary sclerosing cholangitis, there is a lack of good evidence to guide cholangiocarcinoma surveillance in these patients.

"The low prevalence and long duration of PSC [primary sclerosing cholangitis] present substantial barriers to better understanding risk stratification, developing biomarkers, and measuring the impact surveillance has on clinical outcomes," they wrote.

The first recommendation was that surveillance for cholangiocarcinoma and gallbladder cancer should be considered in all adult patients with primary sclerosing cholangitis, regardless of their disease stage. The authors especially emphasized the importance of surveillance in the first year after a diagnosis of primary sclerosing cholangitis, in patients who also have ulcerative colitis, and in those diagnosed at an older age.

They cited one study that found regular surveillance of patients with primary sclerosing cholangitis was associated with significantly higher 5-year survival rates, compared with those no regular screening (68% vs. 20%; *P* less than .0061).

In terms of surveillance modalities, the update suggested 6- to 12-monthly imaging of the biliary tree with ultrasound computed tomography, computed tomography, or magnetic resonance imaging – with or without serum carbohydrate antigen 19-9. However the authors wrote that MRI was often preferred to CT because of its superior sensitivity.

They advised against endoscopic retrograde cholangiopancreatography with brush cytology for routine surveillance because of procedural risks. On the other hand, they suggested this procedure, with or without fluorescence in situ hybridization analysis and/or cholangioscopy, could be used for investigation.

"In addition to ERCP [endoscopic retrograde cholangiopancreatography] with brushings, endoscopic ultrasound, intraductal ultrasonography, and cholangioscopy may be used to direct biopsy sampling," they wrote. Symptoms such as increasing cholestatic biochemistry values, jaundice, fever, right upper–quadrant pain, or pruritus should trigger evaluation for cholangiocarcinoma.

However the authors advised "great caution" with the use of fine-needle aspiration of perihilar biliary strictures in liver transplant candidates be-

Continued on following page

Wasteful health care spending could reach $935 billion

BY GREGORY TWACHTMAN
MDedge News

Wasteful spending in health care could reach almost $1 trillion dollars, according to new research published in JAMA.

Review "of the current literature of the cost of waste in the U.S. health care system and evidence about projected savings from interventions that reduce waste suggest that the estimated total costs of waste and potential savings from interventions that address waste are as high as $760 billion to $935 billion and $191 billion to $282 billion, respectively," William Shrank, MD, chief medical and corporate affairs officer at Humana, and colleagues wrote in an article published Oct. 7, 2019, in JAMA.

"These estimates represent approximately 25% of total health care expenditures in the Unites States, which have been projected to be $3.82 trillion for 2019," the authors noted, adding that it is a little lower than other estimates that have waste as high as 34% of spending.

Authors looked at waste across six domains, including failure of care delivery, failure of care coordination, overtreatment or low-value care, pricing failure, fraud and abuse, and administrative complexity.

Dr. Shrank and colleagues noted that administrative complexity was associated with the greatest contribution to waste, accounting for $265.6 billion in waste, adding that there are no studies that identified savings from interventions to alleviate administrative complexity.

"Some of that complexity results from fragmentation in the health care system," they stated. "Recent proposals by CMS [the Centers for Medicare & Medicaid Services] and the Office of the National Coordinator of [sic] Health Information Technology to foster data interoperability and government initiatives such as Blue Button 2.0 will hopefully alleviate some burden as information flows more freely and billing and authorization processes become more automated."

They also point to greater use of value-based payments as a possible avenue toward greater cost savings in this category.

The second largest contributor is pricing failure, which is estimated to be in the range from $230.7 billion to $240.5 billion, with interventions generating savings ranging from $81.4 billion to $91.2 billion.

'The biggest challenge in removing waste from the health care system is one of politics. People and organizations make huge profits from the current system and have a vested interest in maintaining the status quo.'

And as the health care system evolves to a value-based paradigm, it is expected to have the least impact in this category "since pharmaceutical pricing represents a major component of this waste domain and would not be affected by new approaches to care delivery and reimbursement," Dr. Shrank and colleagues wrote.

That being said, the authors stated that policy interventions "are needed to drive meaningful reductions in waste in this domain. Additionally, in the dynamic health care marketplace, where profit-motivated firms will respond to any new policy with strategies to protect their margins, no single policy is likely to suffice; a coordinated policy effort is likely needed to create long-standing change that will meaningfully reduce waste resulting from pricing failure."

Commenting on the article, Donald M. Berwick, MD, president emeritus and senior fellow, the Institute for Health Care Improvement, Boston, and former CMS administrator, said, "The biggest challenge in removing waste from the health care system is one of politics. People and organizations make huge profits from the current system and have a vested interest in maintaining the status quo. ... Physicians hold power in this by championing more shared-risk payment structures that encourage everyone to be more conscious of waste."

gtwachtman@mdedge.com

SOURCE: Shrank W et al. JAMA. 2019 Oct 7. doi: 10.1001/jama.2019.13978.

Continued from previous page

cause of the risk of tumor seeding if the lesion turned out to be cholangiocarcinoma.

On the question of cholangiocarcinoma surveillance in pediatric patients and those with small-duct primary sclerosing cholangitis, the authors wrote that cholangiocarcinoma was so rare in these patients that routine cholangiocarcinoma surveillance was not required.

The clinical update also looked at the prevalence and risk factors for gallbladder cancer, which affects around 2% of individuals with primary sclerosing cholangitis. Two studies found gallbladder polyps in 10%-17% of patients, but the authors noted that "the optimal modality for diagnosis of gallbladder polyps in PSC remains unknown."

"Because of the high risk of malignancy in gallbladder mass lesions and a 5-year survival rate of 5% to 10% for gallbladder cancer, patients should undergo annual US [ultrasound] screening," they wrote.

They said the question of whether to perform a cholecystectomy in patients with gallbladder polyps should be guided by the size and growth of the polyps because there is an increased risk of gallbladder cancer in polyps larger than 8 mm and by the clinical status of the patient.

Finally, the update examined the issue of hepatocellular carcinoma in patients with primary sclerosing cholangitis, which – while rare – may increase with the presence of cirrhosis.

The authors advised that patients with primary sclerosing cholangitis and cirrhosis should undergo surveillance for hepatocellular carcinoma every 6 months with ultrasound, CT, or MRI.

"We anticipate that with the development of large patient cohorts, advances in uncovering genetic and other risk factors for cholangiocarcinoma, and development of effective treatments for PSC, further refinement of this practice update will be required."

Two authors declared consultancies, grants and research contracts with the pharmaceutical sector. No other conflicts of interest were declared.

ginews@gastro.org

SOURCE: Bowlus CL et al. Clin Gastroenterol Hepatol. 2019 Jul 12. doi 10.1016/j.cgh.2019.07.011.

GIs must position themselves

Digital *from page 1*

"There are ways to survive trends like this if we can move ourselves higher in the food chain."

Other players in the health care space are figuring it out, he said. For example, the state of Ohio has five Medicaid plans; in 2018, aggregate profits for these plans were approximately 400 million dollars. Laying this profit figure against the backdrop of Medicare reimbursement rates for physician services makes it clear that "we have to figure out ways to survive this game," he said.

"Health systems keep their lights on because of the hospital reimbursements – that pays for everything else," said Dr. Decker, adding that payments from commercial insurers fill the coffers that, in turn, pay physicians who are employed by health systems. However, there's a sea change underway in the sites in which care is delivered: "There's enormous pressure to get people out of the hospital and out of the emergency rooms," said Dr. Decker; "And that's not always better for patients."

That shift to delivering care outside of the four walls of the hospital represents an opportunity for digitally savvy companies, many of whom may actually have little experience with health care delivery.

"Digital disruption is a sleeping giant that is easy to ignore, but you do that at your own peril. It's happening in front of your eyes. My message today is: Figure out how you can move yourself further down the line."

Chronic diseases, said Dr. Decker, "represent an opportunity for providers and health systems to leverage digital disruption." Overall, health care services contribute to only 10% of a patient's health, said Dr. Decker, and are far overshadowed by individual health behaviors and social determinants of health. Is there a role for physicians to move beyond the clinic as partners in the digital disruption of health care? Yes, said Dr. Decker: "I believe that providers have the right to be involved in other aspects of peoples' lives to make them better, and yes, also to survive financially."

"Sixty percent of this country has a chronic disease. We as health care providers need to think differently about that."

Changes are already well underway, with score upon score of startup companies developing apps that utilize smartphones and wearable devices to offer coaching, health education, and remote monitoring to consumers. Silicon Valley is already partnering with patients and payers to achieve digital monitoring and care delivery. But relatively few of these partnerships have actually involved physicians in building and executing the solutions they offer. "And that's our fault, for not making sure we are part of this disruption," said Dr. Becker.

Further, the evidence base for much of this monitoring and intervention is low. Physicians who get on board at the early stages of technology development could make a real difference, he said.

Looping back to the current payer model, Dr. Decker asked, "Which pool of money is this coming from?" From the same pool of money that pays physicians, he said.

This isn't a time when physicians can afford to wait and see how the digital health care landscape evolves, stressed Dr. Decker, making the point that it's hard to discern when you're in the middle of disruptive change.

All the building blocks are in place for physicians to begin contributing to health care's digital disruption, said Dr. Decker. The Centers for Medicare & Medicaid Services already have reimbursement codes for remote patient monitoring, for example.

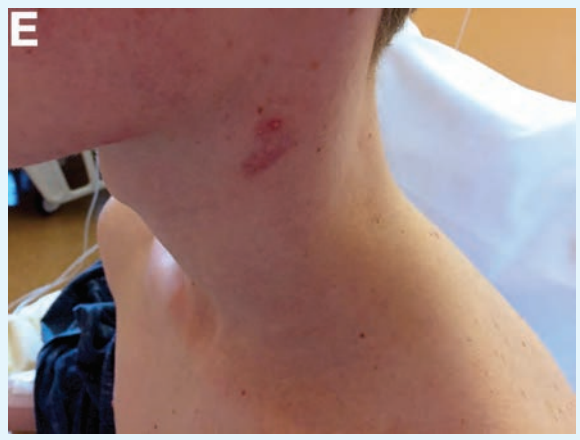
Dr. Decker reported that he had no relevant conflicts of interest.

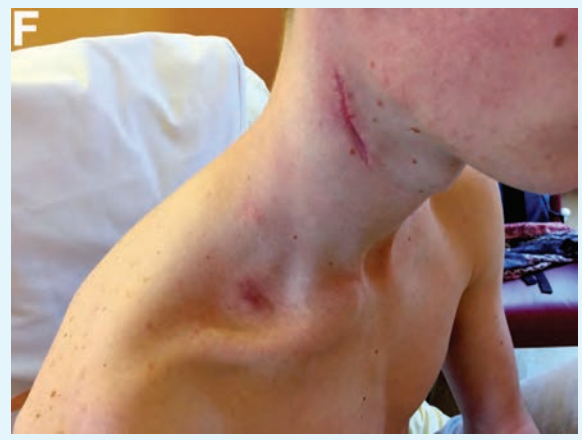
koakes@mdedge.com

CLINICAL CHALLENGES AND IMAGES

The diagnosis

Answer to "What is your diagnosis?" on page 38: Aseptic abscesses syndrome





AGA Institute

The clinical presentation with cervical feverish lymphadenopathy in a patient who underwent anti–tumor necrosis factor–alpha therapy was worrisome and suggestive of tuberculosis lymphadenitis. However, the ineffective antituberculosis treatment and the negative exploration for an etiology instead suggested another pathologic process. After antituberculosis treatment and because repeated negative results came from extensive searches for an infectious cause, a corticoid treatment was subsequently initiated. The clinical response was quick, with apyrexia, diminution of C-reactive protein at 10 mg/L, disappearance of the swelling, and complete healing of the fistula in 3 weeks (Figures E, F). This response to steroid treatment suggested an autoinflammatory pathologic process. Histology with epithelioid cell granuloma could evoke metastatic Crohn's disease. However, this hypothesis was unlikely in this case because inside the granuloma was spotted noncaseous necrosis, and because symptoms occurred under infliximab treatment while the disease was well controlled throughout the period in question. Furthermore, metastatic Crohn's disease is usually localized in skin creases, such as the submammary fold, inguinal areas, and abdominal skinfold creases.[1] In addition, we are not aware of any lymph node involvement described in literature.

Aseptic abscesses syndrome is a rare condition associated with Crohn's disease first described in 1995 by André et al.[2] Aseptic abscesses syndrome is an autoinflammatory disease involving neutrophils that is characterized by disseminated sterile purulent collections. An inflammatory bowel disease is associated in 70% of the cases.[3] Aseptic abscesses are generally located in the spleen (90% of cases) and abdominal lymph nodes, but can also affect the liver, lung, pancreas, and superficial lymph nodes.[3] Repeated bacteriologic tests are always negative. Fever is the most frequent clinical feature (90%) and persists despite antibiotic therapy, whereas symptoms can vary depending on the aseptic abscesses localization. Biochemical tests show an increased CRP and leukocyte count. Histologically, aseptic abscesses are well-limited nodular lesions measuring from a few millimeters to 7 cm and containing white pus. These abscesses are surrounded by epithelioid cell granulomatous reaction, inside of which can be found a noncaseous necrosis, unlike tuberculosis. Specific colorations are negative as well (Ziehl, periodic acid-Schiff, Grocott, and Whartin-Starry).

In subcutaneous node involvement, the main differential diagnosis is pyoderma gangrenosum, but abscesses are not surrounded by granulomatosis reaction in pyoderma gangrenosum. Limited forms can be treated by colchicine, thalidomide, or dapsone, but steroid therapy is almost always necessary, with a consistently favorable evolution. However, relapses occur in two-thirds of cases.

In conclusion, aseptic abscesses syndrome is a diagnosis of exclusion, which is rare and should be considered in a patient known for inflammatory bowel disease who develops fever and deep abscesses with negative results on repeated searches for infectious causes.[3]

References

1. Guest GD, Fink RLW. Metastatic Crohn's disease: case report of an unusual variant and review of the literature. Dis Colon Rectum. 2000;43:1764-6.

2. André M, et al. Unexplained sterile systemic abscesses in Crohn's disease: aseptic abscesses as a new entity. Am J Gastroenterol. 1995;90:1183-4.

3. André M, et al. Aseptic abscesses: a study of 30 patients with or without inflammatory bowel disease and review of the literature. Medicine (Baltimore). 2007;86:145-61.

ginews@gastro.org

HHS floats Stark revisions to support value-based care

BY ALICIA GALLEGOS
MDedge News

Federal health officials are seeking to update provisions of the Stark Physician Self-Referral law and the federal Anti-Kickback Statute in an effort to encourage more physicians to enter into value-based care arrangements.

The long-awaited reforms would create permanent exemptions and safe harbors to protect doctors participating in legitimate value-based arrangements. If finalized, the proposals also would offer flexibility for innovation and improved care coordination, while easing the compliance burden for health care professionals and maintaining safeguards against actual fraud and abuse, according to the U.S. Department of Health & Human Services.

The proposals acknowledge that the Stark Law has been an unintentional roadblock to value-based programs in part because it circumscribed parties' exchanges of rewards for good behavior, said Donna K. Thiel, a Washington-based health law attorney.

"This should be helpful to doctors in that it removes some of the risk in such arrangements under the existing law," she said in an interview. "If finalized, the new regulations will alleviate some roadblocks created by the Stark Law with respect to hospital-physician and other arrangements designed to enhance care coordination, improve quality, and reduce waste. Likewise, the changes to the [Anti-Kickback Statute] and Beneficiary Inducement laws loosen the reins on compensation arrangements that might be technical violations of those laws where the arrangement fosters [value-based payments] or efficiency, transparency, or innovation in the provision of health care."

"These proposed rules would be a historic reform of how healthcare is regulated in America," HHS Deputy Secretary Eric Hargan said in a statement. "They are part of a much broader effort to update, reform, and cut back our regulations to allow innovation toward a more affordable, higher quality, value-based health care system, while maintaining the important protections patients need."


Ms. Downs

The two proposed measures – one rule by the Centers for Medicare & Medicaid Services and the other rule by the Office of Inspector General – include safe harbors for certain remuneration exchanged among participants in a value-based arrangement that fosters better coordinated and managed patient care. This includes care arrangements that improve quality, health outcomes, and efficiency, value-based arrangements with substantial downside financial risk, and value-based arrangements with full financial risk.

In addition, the proposals would protect certain tools and supports shared or delivered under patient engagement and support arrangements to improve quality, health outcomes, and efficiency. For example, a specialty physician practice could share data analytics services with a primary care physician practice in an effort to coordinate care and better manage shared patients, according to the HHS.

If finalized, the changes would modify existing safe harbor for personal services and management contracts to add flexibility with respect to outcomes-based payments and part-time arrangements, according to a fact sheet by the OIG. The rule would also modify existing safe harbors for local transportation to expand and modify mileage limits for rural areas and for transportation for discharged patients.

The proposals include guidance on several requirements that must be met for physicians and health care providers to comply with the Stark Law. For example, compensation provided to a doctor by another health care provider generally must be at fair-market value. As part of the proposals, the HHS offers guidance on how to determine if compensation meets this requirement and provides clarity on a range of other technical compliance requirements.

If the rules are approved, more physicians may be encouraged to become part of value-based arrangements, according to Anjali N.C. Downs, a health law attorney based in Washington.

"As stakeholders have long known, physicians are key components to achieving value-based health care delivery and payment systems," Ms. Downs said in an interview. "The proposed rules remove regulatory barriers that chill physician's willingness and ability to participate in or even consider participating in integrated care delivery models, alternative payment models, and incentive based arrangements based on outcomes and reductions in cost."

However, Ms. Thiel noted the proposed rules do not scale back the affected laws as comprehensively as some stakeholders hoped.

"Some would like to see the Stark law repealed completely, opining that the Stark Law has become too complex, creating obstacles in the transition from the fee-for-service model," Ms. Thiel said. "Because Stark is a strict liability law, meaning no proof of specific intent to violate is required, providers and doctors can violate Stark even when there is no corrupt intent involved. This new regulation purports to fix some of those issues, but others will remain. Some in the industry believe full repeal is necessary to allow the health industry to move forward with pay-for-performance initiatives."

Physician organizations expressed cautious optimism about the proposed changes.

"While the [American Medical Association] is assessing the full scope of today's proposals, we are pleased to see that the administration has acknowledged a need for policy revisions in response to potential barriers that impede the delivery of patient-centric care," AMA President Patrice A. Harris, MD, said in a statement. "Currently, the Stark Law and Anti-Kickback Statute can have a negative impact on the ability of physicians to assist with coordination because they inhibit collaborative partnerships, care continuity, and the engagement of patients in their care. These obstacles can hinder the health care system's movement to value-based care."

The proposed rules have been submitted to the Federal Registry and are not yet published. The HHS will accept mail and electronic comments about the proposals up to 75 days after publication in the registry.

agallegos@mdedge.com

Judge dismisses doctors' lawsuit against ABIM

BY ALICIA GALLEGOS
MDedge News

A district court has dismissed a lawsuit levied by a group of physicians against the American Board of Internal Medicine (ABIM) over its maintenance of certification (MOC) program, calling the legal challenge "flawed."

In a Sept. 26 decision, U.S. District Court Judge for the Eastern District of Pennsylvania Robert F. Kelly Sr. said the plaintiffs failed to demonstrate sufficient evidence for their antitrust and unjust enrichment claims against ABIM. The doctors also did not establish any showing of anticompetitive conduct by ABIM to support a monopolization claim, the judge ruled.


Dr. Baron

'ABIM is pleased that the United States District Court for the Eastern District of Pennsylvania dismissed in its entirety a lawsuit that alleged physicians were harmed by the requirements for maintaining ABIM board certification.'

"We disagree with plaintiffs and find that ABIM's initial certification and MOC products are part of a single product and do not occupy distinct markets," Judge Kelly wrote in his decision. "Not only are we unconvinced by plaintiffs' arguments, we find that plaintiffs' entire framing of the ABIM certification to be flawed. In essence, plaintiffs are arguing that, in order to purchase ABIM's initial certification, internists are forced to purchase MOC products as well. However, this

Continued on page 57

PROFESSIONAL OPPORTUNITIES

RISE ABOVE.

Come care with us.

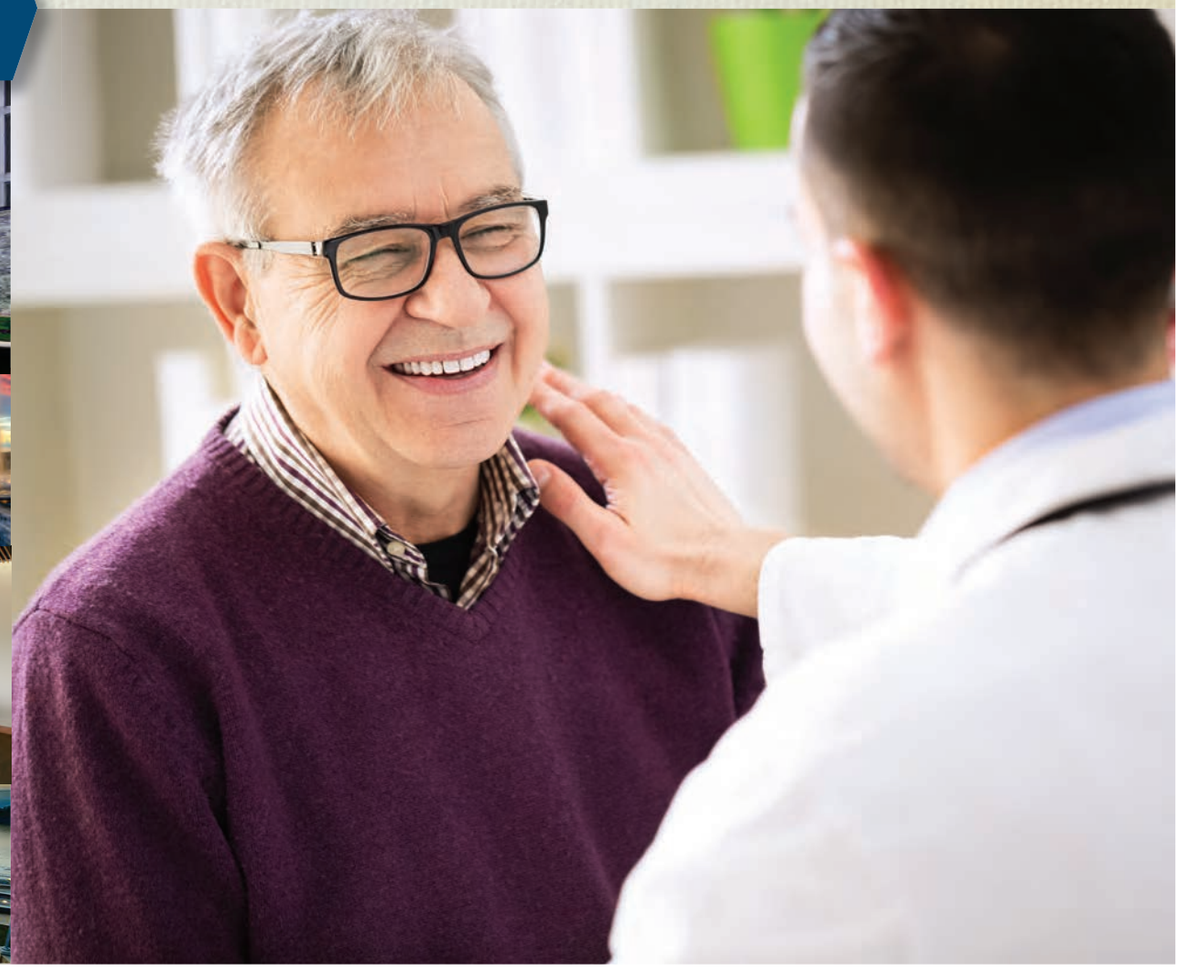
HERE, WE'VE RISEN ABOVE. We've pioneered advanced care for our friends and neighbors in this region that we are proud to call home. We've risen above and built a team of dedicated caregivers; together, for and around one thing – our patients. We've risen above and built a state-of-the-art hospital with leading-edge design and technology rivaling any in the nation. We enjoy a low cost of living but an exceptional quality of life, all in a community that feels large, yet is comfortable enough to call home.

OWENSBOROHEALTH.ORG/OPPORTUNITIES

Owensboro Health

NEWLY-BUILT HOSPITAL

OWENSBORO RIVERFRONT



(270) 485-2725 / CALL / TEXT
Mitchell Sims
mitchell.sims@owensborohealth.org

CENTRALLY-LOCATED IN THE MIDWEST

TEXT/CALL MITCHELL FOR MORE INFORMATION, AND TO BE ENTERED FOR A CHANCE TO WIN A PAIR OF APPLE AIRBUDS.

Gastroenterologist - $550,000 / $600,000

For *board-eligible new grads,* $550,000 two-year guaranteed base salary with $50K in student loan repayment options ($25K per year for 2 years). For *board-certified experienced GI's,* $600,000, two-year guaranteed base salary.

- $50K Up-front bonus / productivity RVU bonus potential / six weeks of paid time off
- $6K CME Allowance / stipend payments available
- An established, employed practice with three Gastroenterologists and three APRNs / 1:4 Call
- Openings due to patient demand in a community of 120,000, with a regional draw of 400,000; and one GI being promoted to Chief Medical Officer
- Fully-integrated EMR (EPIC) in clinics and hospital / excellent specialty backup

CLASSIFIEDS

Also available at MedJobNetwork.com

PROFESSIONAL OPPORTUNITIES

Disclaimer GI & HEPATOLOGY NEWS assumes the statements made in classified advertisements are accurate, but cannot investigate the statements and assumes no responsibility or liability concerning their content. The Publisher reserves the right to decline, withdraw, or edit advertisements. Every effort will be made to avoid mistakes, but responsibility cannot be accepted for clerical or printer errors.

Leadership development in clinical gastroenterology

"Average leaders raise the bar on themselves; good leaders raise the bar for others; great leaders inspire others to raise their own bar."
– Orrin Woodward

BY LISA MATHEW, MD

Gastroenterology practices face numerous challenges every day. From addressing reimbursement changes to the development of new service lines to ensuring the highest quality of patient care – the cacophony can drown out the ability of even the most well-meaning groups from attending to the development of internal leadership skills. But thoughtful and intentioned "succession planning" is essential to the long-term success of any practice. At the bedside, we are all leaders – physicians are comfortable in this authoritative leadership role. But most physicians feel less confident assuming a leadership role when it comes to the daily activities of running a busy practice, or more importantly, developing business strategy in a rapidly changing world. Gastroenterology practices and divisions are increasingly challenged with numerous essential nonclinical tasks, including complex practice administration and employee management, intragroup leadership and maintenance of cohesion, and strategy development. Future success in the evolving health care market will depend on the development and execution of new business and service approaches, as well as emerging partnerships and alliances. It will be essential for leaders to effectively shepherd value-added organizational change, not an easy task, and to embrace more participative leadership skills to accomplish goals.

The majority of independent practices are run by a single president; most GI divisions are run by a single chief. A number of factors may inhibit the interest or cultivation of new leaders. There remains a minimum of devoted attention to training more junior physicians to fill leadership roles, and an autocratic practice structure does not naturally promote junior physician engagement in practice leadership. Few physicians receive formal business training through MBA, or other training programs or resources. Physician leaders may be expected to perform many leadership and management duties outside normal clinical activities. This creates stress, risks burn out, and can inhibit succession interest.

Future success in the evolving health care market will depend on the development and execution of new business and service approaches, as well as emerging partnerships and alliances.

With the increasing corporatization of medicine, if physicians sacrifice key leadership roles and duties, they are quickly filled by ad-

Continued on following page

Continued from page 54

is not the case. ... Nowhere in the amended complaint do plaintiffs allege that they were forced to buy MOC products in order to purchase the initial certification."

The judge dismissed the suit, but allowed the plaintiffs 14 days to submit an amended complaint reoutlining their claims of illegal monopolization and racketeering against the board. If the amended complaint passes legal muster, the judge could revive those claims.

ABIM President Richard J. Baron, MD, expressed satisfaction that the court granted the board's motion to dismiss the case for failure to state a valid claim.

"ABIM is pleased that the United States District Court for the Eastern District of Pennsylvania dismissed in its entirety a lawsuit that alleged physicians were harmed by the requirements for maintaining ABIM board certification," Dr. Baron said in a statement.

C. Philip Curley, a Chicago-based attorney for the physician plaintiffs, said the case is far from over.

"The four internists who brought the lawsuit were invited to file amended claims, which is certainly being considered," Mr. Curley said in an interview. "If necessary, all available appeals will also be pursued to the fullest. No one was under the impression that the fight to bring MOC to an end would be quick or easy."

The original lawsuit, filed Dec. 6, 2018, in a Pennsylvania district court, claims that ABIM is charging inflated monopoly prices for maintaining certification, that the organization is forcing physicians to purchase MOC, and that ABIM is inducing employers and others to require ABIM certification. On Jan. 23 of this year the legal challenge was amended to include racketeering and unjust enrichment claims.

The four plaintiff-physicians want the court to find ABIM in violation of federal antitrust law and to bar the board from continuing its MOC process. The suit is filed as a class action on behalf of all internists and subspecialists required by ABIM to purchase MOC to maintain their ABIM certifications.

Two other lawsuits challenging MOC, one against the American Board of Psychiatry and Neurology and another against the American Board of Radiology, are ongoing. A fourth lawsuit against the American Board of Medical Specialties, the American Board of Emergency Medicine, and the American Board of Anesthesiology was filed in February.

Chicago-based cardiologist Wes Fisher, MD, and fellow physicians with the Practicing Physicians of America are funding the plaintiffs' legal efforts through a fundraising campaign that has raised more than $300,000.

In an interview, Dr. Fisher called the legal fight against ABIM "a David versus Goliath effort" and said the battle will continue.

"The ABIM may have won this first round, but ... they have only dodged the antitrust tying claim and unjust enrichment claims," Dr. Fisher said. "The monopoly claim and racketeering claims are still very much open. Plaintiffs have 14 days to amend their compliant."

agallegos@mdedge.com

Continued from previous page

ministrators with priorities that may not align with patient care and physician well-being. In fact, between 1975 and 2010, the number of physicians in the United States grew by 150%. During that same time period, the number of health care administrators grew by 3,200%.[1] Skilled practice administrators are of tremendous value to most practices, but physician involvement and comanagement at the administrative level remains crucial to align practice goals to optimize patient care.

How do we combat these trends and defend the role of physicians in maintaining control of fundamental aspects of their clinical practices? This begins with making the development of leadership skills an active priority, coupled with baseline levels of training in practice administration for gastroenterologists. There needs to be processes that allow junior physicians to determine their aptitude for and interest in leading, and conversely for established leaders to identify talent. Currently a minimum of this type of training happens during fellowship; the majority of physicians learn this after beginning their practice. Just as we must master clinical and endoscopic skills, we must also attend to the development of practical skills like understanding revenue cycle management, communicating effectively, and reading an income statement. Practices should consider supporting administrative education as an integral part of training, as well as time away from clinical duties to learn and participate in practice leadership, management, and mentorship activities. Physicians need the tools to understand how their practices are run. Arming our next generation of physicians with the necessary skills to thrive in corporate medicine is required.

Physician leadership development, however, remains the responsibility of both the individual and the organization. We each have a role to play in elevating our practices and our community. Passion for medicine and our profession necessarily motivates each of us to take on these challenges. But leadership skills also take mentorship and encouragement to grow.

Taking the time to foster leadership skill development for more junior colleagues allows a natural and comfortable delegation of duties over time.

The dividends to a practice attending to leadership development, however, can be exponential. When each physician member of a practice is encouraged to develop natural aptitudes and address practice challenges (within a shared vision), the practice as a whole benefits. Taking the time to foster leadership skill development for more junior colleagues allows a natural and comfortable delegation of duties over time. Just as physicians will need to commit time and efforts in developing themselves, gastroenterology practices need to commit to supporting their growth, and creating avenues for such tracks within incentive-based compensation models that can create barriers.

Practically, leadership development in GI practices, both in the community and at academic centers, can be accomplished in a variety of ways. Some groups have formal internal practice leadership structures that allow for the natural development of physician leadership from within. Participation in an Executive Committee that supports the president and practice administrator can be highly educational and a fertile forum to develop junior leaders. Current physician leaders also have the opportunity and obligation to include junior physicians in strategy discussions, negotiations, and col-

laborations with administrators. Mentorship, whether formal or informal, is essential to leadership and business skill development. Many practices already have formal developmental programs in place to encourage leadership in office managers, in practice administrators, and at the nursing level. Arguably, most have been less structured in cultivating leadership at the physician level.

There are also numerous opportunities for leadership within your local medical community on hospital quality boards, industry partnerships, and community engagement/service groups. On a national level, working within a professional society can be an excellent opportunity for professional growth and leadership development. The AGA has several dedicated positions for young GIs on committees as well as several programs specifically devoted to leadership training such as the AGA Young Leaders program and Women's Leadership program. All of these represent opportunities to give junior members a seat at the table to develop and hone leadership skills.

When a culture of leadership and ownership is established, increased engagement naturally follows. When we spend the time to encourage our colleagues to attend to not just the highest quality of medical care but also consider and develop the highest level of patient service through strategic practice development, our overall care is elevated. Developing leadership raises the bar for everyone.

With the increasing corporatization of medicine, it is the duty of physician leaders to be prepared to advocate and protect our patients, our practices, and our professions. But without proper cultivation of leadership within our practices and groups, a leadership vacuum will leave us all vulnerable to sacrificing these important roles to those who do not wear the white coat. Across the country, large and thriving gastroenterology groups are providing cutting-edge care for their patients, despite increasing challenges. Let's remember to take the time to prepare future leaders for these challenges as well – ultimately the success of our practices and our patients depend on it.

Reference

1. Cantlupe J. The rise (and rise) of the healthcare administrator. Athenainsight. https://www.athenahealth.com/insight/expert-forum-rise-and-rise-healthcare-administrator.

Dr. Mathew is a gastroenterologist at South Denver Gastroenterology in Denver. She has no conflicts of interest.

INDEX OF ADVERTISERS

WWW.GIHEPNEWS.COM
GI & HEPATOLOGY NEWS
THE OFFICIAL NEWSPAPER OF THE AGA INSTITUTE