Northern California Society for Clinical Gastroenterology

NEWSLETTER

ISSUE NO. 11 | April 2023

The Northern California Society for Clinical Gastroenterology (NCSCG) Board and Meeting Planning Committee invite you to attend the 2023 GI Symposium. This year's meeting will be held in-person as a two-day event at the Hyatt Regency Monterey Hotel in Monterey, CA on May 20-21, 2023.

The symposium will provide a unique opportunity to receive a comprehensive update on gastrointestinal diseases from nationally renowned faculty. You will also have ample opportunity to interact with your colleagues, our expert faculty members, and industry representatives, as well as time to enjoy all that Monterey has to offer.

We have reserved a block of rooms for NCSCG members at Hyatt Regency Monterey Hotel, the location of the 2023 GI symposium.

We hope you are as excited as we are for in-person learning and networking, and to enjoy the beautiful surrounding Monterey and Monterey Bay.

DON'T MISS THE FOLLOWING SESSION!

GI Janes and Allies
Clinical Exchange Reception

Saturday, May 20 at 4:30PM

REGISTER NOW!

AGENDA & FACULTY

Devon Kiker, FNP-C
Digestive Disease Consultants
NCSCG APP Committee Member

Any personal background you would like to share

My name is Devon Kiker. I am a California native and consider Central California to be my home. I obtained my NP degree from Georgetown University and have been working in the field of gastroenterology ever since. Under the guidance of my exceptional mentor, Dr.Marina Roytman at UCSF Fresno, I recently completed a rigorous NP Hepatology Fellowship with the AASLD. I am a faculty member at UCSF School of Nursing, and am an APP board member for the Northern California Society for Clinical Gastroenterology. I am currently employed at Digestive Disease Consultants in Fresno, CA

Clinical and/or research interests

My clinical interests include NAFLD, alcohol-related liver disease,viral hepatitis, and obesity medicine.

Your involvement with the NCSCG and why did you decide to join the NCSCG?

Yearly conference attendance. To be part of the NCSCG community. Finding supportive, intelligent,professional, and like-minded individuals has been tremendously beneficial to my career andpersonal life. I've met some great friends through the NCSCG.

What most excites you about GI/Hepatology in in the next 2-3 years

What excites me most about the future of GI/Hepatology is the advancement intreatment and cure of viral hepatitis, and emerging therapies for obesity.

Other interesting facts you would like to share about yourself.

I'm blessed to be 6 feet tall. I'm often tasked with reaching clinical supplies that are stored on the top shelf. When I'm not working I enjoy spending time with myson, playing board games, traveling, and relaxing with my dog, Murphy.

APP CORNER

Maribel Torres, MSN, FNP-C
Adventist Health-Hanford, CA
NCSCG APP Committee Member

Any personal background you would like to share

I am from Visalia, first generation, and first in my family to receive a Master's Degree. I received my master's in nursing, and Nurse Practitioner through Fresno Pacific University. My clinical background experience includes Internal Medicine, Nephrology, and most recently working with an underserved community of GI/Hep patients.

Clinical and/or research interests

I have a wide variety of clinical experience which includes: Colon screening, IBS, IBD, Hepatitis, Cirrhosis, Nash, fatty liver, GERD, functional disorders, and Motility disorders, all in a short amount of time.

Your involvement with the NCSCG and why did you decide to join the NCSCG?

I learned about NCSCG in 2021 through Mikhail Alper and became involved immediately. I began working in this specialty field the same year, and I joined as an APP committee member in 2021.

I decided to join NCSCG because I knew it would be great to network with other professionals. I am happy to have met many amazing, and intelligent providers. I also wanted to continue growing and learning about the different disease processes.

What most excites you about GI/Hepatology in in the next 2-3 years

What most excites me about GI/Hepatology are the advances and development in medication and treatment for our patients. Also knowing I can make a difference in my community, knowing that the population is growing day by day of newly diagnosed patients. I have grown up knowing I want to give back to my community. Currently the location I practice in is considered a rural area of the Central Valley. I plan in the future to learn more about research, and become involved.

Other interesting facts you would like to share about yourself.

Interesting fact is that I am a busy wife, daughter, and mother of 4 beautiful girls (Yes I said 4), I recently welcomed twin girls. I also enjoy music, dancing, and traveling.

Images in Clinical GI
Can you solve the case?

Welcome to Images in Clinical GI, where we present images from interesting cases submitted by some of our members! This quarter, we present a case from Dr. Frances Lee, a GI fellow at CPMC. ***Answers and discussion on this case can be found on page 15****. We hope you enjoy!*

A 49-year-old woman with asthma, heart failure with reduced ejection fraction, and glomerulonephritis on hemodialysis, was admitted with dyspnea secondary to pulmonary calciphylaxis. Her hospital course was complicated by acute lower gastrointestinal bleeding requiring five units of blood transfusion. Her inpatient medications included amlodipine and sevelamer. She denied using over the counter non-steroidal anti-inflammatory drugs (NSAIDs) prior to admission.

Laboratory studies were notable for white blood cell count 44, hemoglobin 6 from a baseline of 8, potassium 6.3, creatinine 4.4, CRP 219, and erythrocyte sedimentation rate 105. The rest of her labs including her liver enzymes were at her baseline. Stool cultures were negative for enteric pathogens.

Colonoscopy showed multiple rectosigmoid clean base ulcers ranging from 8-20 mm in size (Figure 1). Ulcer edges and centers were biopsied. Histology revealed acute fibro-inflammatory debris, granulation tissue, lamina propria fibrosis, and crystal fragments with characteristic peripheral yellow staining and central pink staining resembling fish scales. Some crystals were embedded in the inflamed colonic tissue (Figure 2).

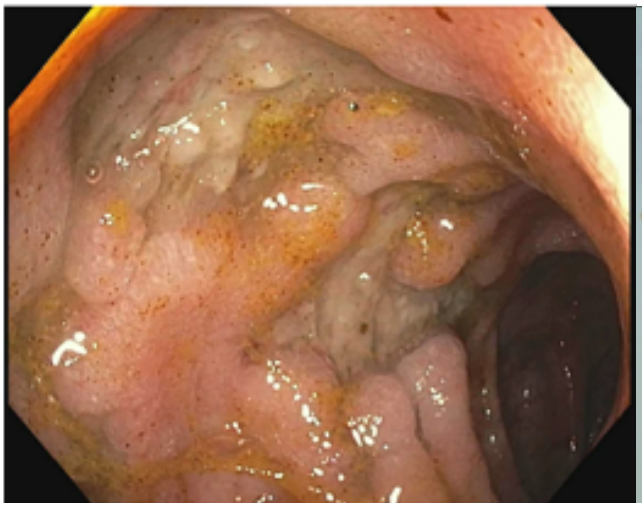


Figure 1.

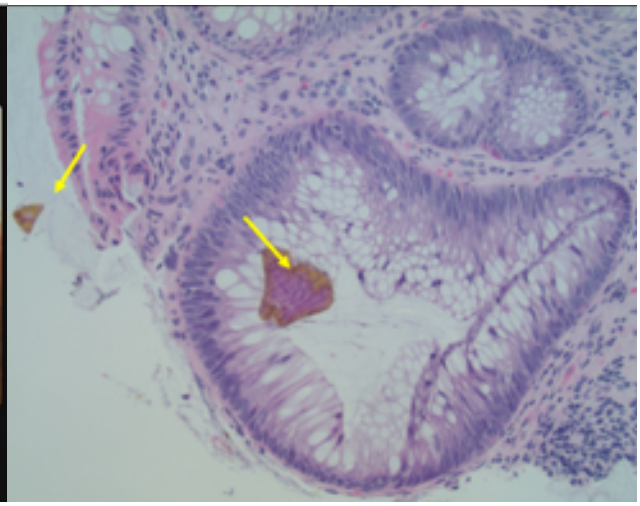


Figure 2.

Figure 1. Endoscopic findings of sigmoid ulcers. **Figure 2:** Colon biopsy H&E stain with "fish scales" like crystals (arrows).

What was the cause of the patient's colonic mucosa injury and ulceration?
What are the "fish scale" crystals that were seen on the biopsies?

If you have any interesting cases you would like to share or suggestions for this section, please contact us at: NCSCG@pacemedcom.com

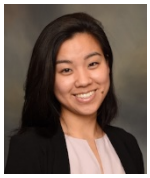
Try to find all 12 GI terms! Answers can be found on page 16. Good luck!

GI WORD SEARCH

Find all 12 terms!

K L X S E P J X C J H W K Q B S F V M T W T N
L B I H S E H Z U T E Z L V N V Z X C E Y K F
V W I Z D P R R N H I A T A L H E R N I A W H
J A H I F T U L I G O B L E T C E L L X B H W
Z V D S P I M C M N Y A M A N O M E T R Y U A
H E M I R C I W S E A H W B Z Y B C T C T K M
C R M T B U N E A P M C W X A B P W I J G Z O
E U D I I L A R L P O F K H G N Y F V R F D N
R L E R T C T V P P T P Q P Y B T E O R J I E
H D R E D E I R O R A N F C Q N F L L X J O D
B W K T S R O Q L D P G S S L S P Q V S O U A
M R Z N U P N F U K E A L U T S I F U C W H L
H G C E V M L D R R H N E B H C J K L J O M I
A D F R D G G V E I H A Q X X A K G U R S B X
E U A J H C M J C Q H R G B N J A H S Z E K G
H I Y Z U E E I I S V W O M U C E C H S K Q J

Kidist K. Yimam, MD is a transplant hepatologist and the Medical Director of the Autoimmune Liver Disease Program at California Pacific Medical Center. She has a focused clinical practice for patients with PSC, PBC and AIH and is a principal investigator for multiple clinical trials for these diseases. Dr. Yimam is actively involved in patient education and support and is the founder of the CPMC Autoimmune Patient Support Group. She is also actively involved in promoting health equity for patients with autoimmune liver diseases by collaborating with national patient advocacy groups.
Dr. Yimam serves as a Board Member of the NCSCG.



Frances Lee, MD is a second-year gastroenterology fellow at California Pacific Medical Center (CPMC). She will complete her transplant hepatology fellowship during her third year of fellowship at CPMC. She is passionate about cirrhosis, portal hypertension, and disparities in healthcare. Dr. Lee is a member of NCSCG Education and Trainee committee.

What is new in the Management of Primary Sclerosing Cholangitis?

Frances Lee, MD[a] and Kidist K. Yimam, MD[b]

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[b]Division of Hepatology and Liver Transplant, California Pacific Medical Center, San Francisco, CA 94109

Primary sclerosing cholangitis (PSC) is a chronic fibroinflammatory cholangiopathy driven by a combination of genetic, autoimmune, and inflammatory factors.[1,2] PSC mostly occurs in conjunction with inflammatory bowel disease (IBD), ulcerative colitis (UC) more so than Crohn's disease (CD). PSC presents with variable phenotypes including large duct PSC, small-duct PSC and PSC-autoimmune hepatitis overlap and can be associated with various complications such as bacterial cholangitis, cholangiocarcinoma, and colorectal cancer in those with colitis. PSC may additionally progress to cirrhosis on average over 21 or more years though the clinical course can be variable in individuals .[1,3.]

Diagnosis

The American Association of the Study of Liver Diseases recently released guidelines for PSC in 2022 with ten distinct changes from the 2010 guidelines (Table 1). The diagnosis of PSC relies on magnetic resonance cholangiopancreatography (MRCP) to diagnose large duct PSC or a liver biopsy when a small duct PSC and PSC-autoimmune hepatitis overlap are suspected (Figure 1). Endoscopic retrograde cholangiopancreatography (ERCP) is no longer part of the diagnostic criteria given the procedure's association with complications and equivocal diagnostic accuracy between ERCP and MRCP.[1,5,6] All patients with PSC should receive a colonoscopy with histologic sampling at PSC diagnosis to evaluate for inflammatory bowel disease (IBD), with repeat colonoscopy every 5 years if IBD is not initially detected. Clinical risk tools, such as the Mayo PSC Risk Score, Amsterdam-Oxford score, and PREsTO score, can risk stratify patients with PSC, but these should be interpreted in the context of each patient's unique characteristics. Additionally,

IgG4-cholangipapthy needs to be ruled out in anyone with suspected PSC as these patients traditionally respond to treatment with systemic steroid.

Strictures and ERCP

MRI/MRCP may demonstrate high grade strictures, defined as greater than 75% reduction in common or hepatic duct size. The guidelines allow for a new term, "relevant stricture," defined as any clinically relevant hepatic duct strictures without need for grading of strictures by invasive or non-invasive imaging. While ERCP is removed from the diagnostic schema of PSC, it should be utilized for therapeutic intervention or tissue sampling, such as in ascending cholangitis and evaluation of malignancy in strictures. ERCP with brushing and FISH should be completed when suspecting perihilar or distal cholangiocarcinoma. PSC patients with cirrhosis, recurrent cholangitis, intractable pruritus, or early-stage hepatobiliary cancers should be referred for liver transplant.

Treatment

There are currently no FDA approved medications for the treatment of PSC. Once diagnosed with PSC, all patients should be considered for PSC clinical trial. Otherwise, low to medium dose ursodeoxycholic acid (UDCA), 13-23 mg/kg/day, should be considered if patients have persistent alkaline phosphatase (ALP) elevation for 6 months. Those on UDCA with improvement or normalization of ALP or resolution symptoms after 12 months of treatment should continue UDCA (Figure 2).[1] Current literature on UDCA for PSC cannot unequivocally support universal use of UDCA but there is emerging data for continued treatment with UDCA for those with improvement of ALP on UDCA therapy. A subgroup analysis of prior randomized control trials on URSO in PSC by Lindstrom et. al. and Stanich et. al. demonstrated patients whose ALP respond to UDCA have improved survival rates compared to patients without biochemical response.[1,7,8] Furthermore, withdrawal of UDCA therapy from patients with PSC has led to biochemical deterioration with increased liver enzymes and bilirubin, increased PSC Mayo Risk Score, and worsening pruritus.[9]

Patients with PSC account for 5% of all liver transplants in the US.[1] MELD exception points can be allocated for recurrent cholangitis if the patient has at least 2 admissions to the hospital within a 1-year period for acute cholangitis with documented bacteremia or evidence of sepsis including hemodynamic instability and has cirrhosis. Additionally, one of the following criteria must be met: biliary tract stricture not responding to endoscopic intervention via ERCP, or the candidate must be diagnosed with a highly resistant bacteria.

Cholangiocarcinoma

While increasing liver transplants has reduced mortality rate from cirrhosis, the mortality risk from cholangiocarcinoma remains the same.[1,4] PSC increases the risk of intrahepatic cholangiocarcinoma (iCCA) by an odds ratio (OR) of 21.5 and perihilar (pCCA) and distal cholangiocarcinoma (dCCA) by OR 40.8.[1] The lifetime risk for CCA is roughly 5-8% and one third of the diagnosis occurs within the first 3 years after PSC diagnosis.[10] Elevated CA19-9 alone cannot diagnose CCA. For diagnosis of iCCA, histopathology is required along with adequate cross-sectional imaging or chest and abdomen, either quad phase CT or MRI, to assess primary mass, vascular invasion, metastasis, and resectability. Diagnosis of pCCA and dCCA is more difficult; these patients should obtain ERCP with biliary brushings for cytology and FISH. EUS-FNA or percutaneous biopsy of perihilar or distal biliary mass should not be completed due to risk of tumor seeding and will exclude patients with early stage CCA from liver transplant consideration. Cross sectional imaging with contrast is additionally required for patients with pCCA or dCCA. PET scan should not be used to diagnose the primary tumor in CCA. Patients with PSC and hilar cholangiocarcinoma should be referred to a liver transplant center immediately as liver transplant is

preferred over resection for patients with PSC who meet the strict transplant selection criteria. Only select centers around the country currently conduct liver transplants for early-stage hilar cholangiocarcinoma using the Mayo protocol, which utilizes neoadjuvant radiation and chemotherapy.[10] This protocol has demonstrated median 5-year post-transplant survival of 65-82%.[11,12]

In summary, patients with PSC present in a heterogenous manner and it is important to understand the variable presentations and make the correct diagnosis. Once diagnosed, patients will need close follow ups with appropriate screening for inflammatory bowel disease, colon cancer, cholangiocarcinoma, and associated conditions such as fat-soluble vitamin deficiencies and screening for osteoporosis. Because there is no FDA approved medical therapy for PSC, patients should be offered to enroll in PSC clinical trial as many agents with variable mechanism of actions are in investigation, targeting the disease itself and symptoms such as pruritus and quality of life. Otherwise, low, or medium dose UDCA can be started for persistently elevated ALP or ongoing symptoms; UDCA can be continued if ALP improve or normalize or if symptoms improve. Current guideline recommends use of UDCA if ALP is elevated as emerging data suggest improvement of ALP correlates with increased survival. Liver transplant should be considered for patients with decompensated cirrhosis, recurrent cholangitis and with early-stage hilar cholangiocarcinoma.

Ten Updates to the AASLD Guidelines on PSC
1. Inclusion of guidance for diagnosis and management of CCA in patients with and without PSC
2. Introduction of term "relevant stricture" defined as any biliary stricture of the common hepatic duct or hepatic ducts associated with signs or symptoms of obstructive cholestasis and/or bacterial cholangitis
3. In patients with equivocal MRI/MRCP findings, repeat high quality MRI/MRCP for diagnostic purposes. ERCP should be avoided for the diagnosis of PSC.
4. In patients with PSC without known IBD, diagnostic colonoscopy with histological sampling should be performed and may be repeated every 5 years if IBD is not initially detected.
5. Colorectal cancer surveillance should begin at age 15 for those with PSC/IBD.
6. New clinical risk tools for PSC are available for risk stratification, but probabilities of events in individual patients should be interpreted with caution.
7. All patients with PSC should be considered for participation in clinical trials; however, UDCA (13-23 mg/kg/day) can be considered and continued if well tolerated with meaningful improvement in ALP (GGT in children) or symptoms with 12 months of treatment.
8. ERCP with biliary brushings for cytology and FISH analysis should be obtained in all patients with suspected perihilar or distal CCA.
9. New UNOS policy regarding standardization of MELD exception points for patients with PSC And recurrent cholangitis.
10. Liver transplant following neoadjuvant therapy is recommended for patients with perihilar CCA <3 cm in radial diameter that is unresectable or arising in the setting of PSC and in the absence of intrahepatic or extrahepatic metastasis.

Table 1. Ten Updates to the AASLD Guidelines on Primary Sclerosing Cholangitis (PSC)

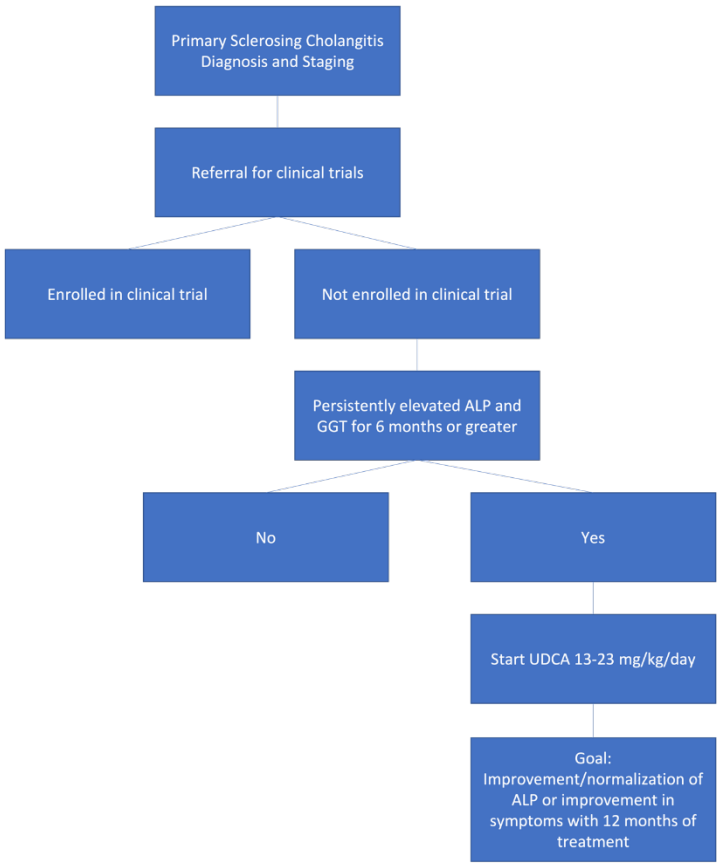

Figure 2. Management schema for Primary Sclerosing Cholangitis (PSC). Based on 2022 AASLD PSC Guidelines.[1]
ALP, alkaline phosphatase; GGT, gamma-glutamyltransferase;UDCA, ursodeoxycholic acid;

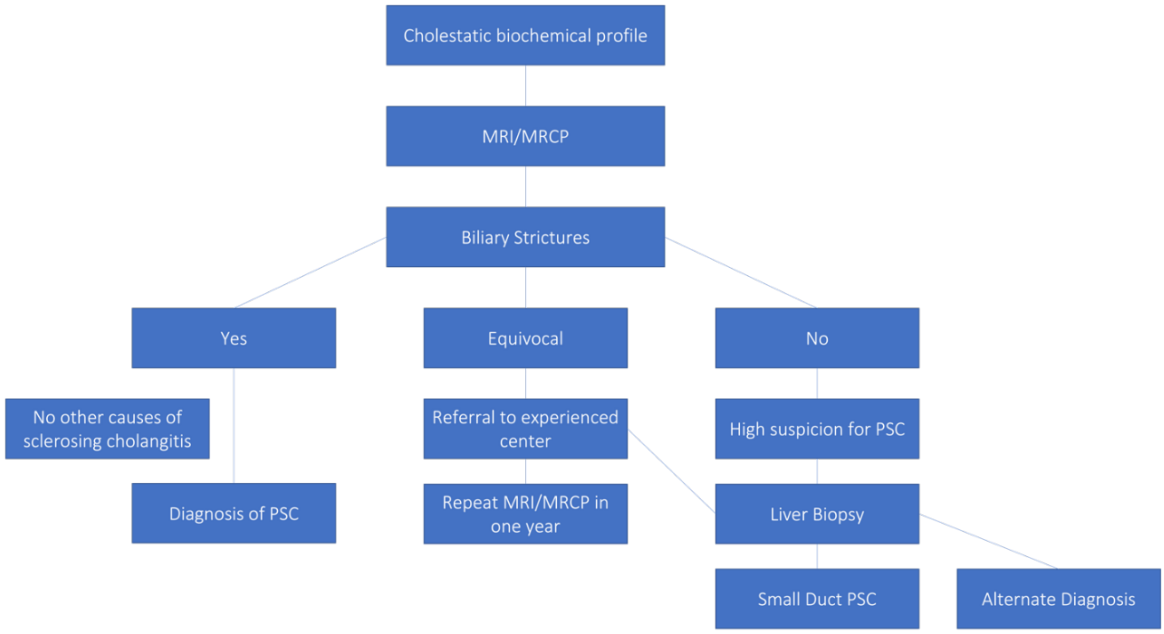

Figure 1. Diagnostic schema for Primary Sclerosing Cholangitis (PSC). Based on 2022 AASLD PSC Guidelines.[1]

References

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Previous Events

CCF Sacramento Professional Education Conference. March 11, 2023
https://www.crohnscolitisfoundation.org/events/professional-education-conference-sacramento

- We held a successful CCF Sacramento Professional Educational Symposium IBD with keynote speakers Dr. David Rubin and Dr. Bincy Abraham at UCD.

CCF Patient Education Conference - MyIBD Learning. March 11, 2023
https://www.crohnscolitisfoundation.org/events/myibd-learning-sacramento

The Third Crohn's and Colitis Foundation Sacramento Professional Education Conference State-of-the-Art Management of IBD, directed by Dr. Ronald Hsu and Dr. Eric Mao, was held at the University of California Davis Medical Center on March 1, 2023. Keynote speakers: Dr. David Rubin delivered a presentation on 'How should we sequence therapies and monitor the disease?' Dr. Bincy Abraham discussed Biologics and Biosimilars.

Other topics:

- Novel small molecules therapy in IBD - Ronald Hsu MD (UCD)
- Inflammatory Bowel Disease 101 - Eric Mao MD (UCD)
- Short Bowel Syndrome - Kendall Beck MD (UCSF)
- Inequities in IBD Care - Jesse Stondell MD (UCD)
- Post-operative Crohn's Disease - Maneesh Dave MD (UCD)
- Practical Pearls and Navigating Barriers to Advanced IBD Therapeutics - And-Thu Truing Pharm D (UCD)

Upcoming Events

1. Bridging Medicine and Music - Colon Cancer Awareness 2023: featuring International renowned American concert violinist Rachel Barton Pine https://youtu.be/w5hv8KhbjjY May 18, 2023 12:00-5:00PM at the West Steps of the Capitol 1315 10th Street, Sacramento CA.

2. NCSCG 20th Annual GI Symposium - Monterey, California. May 20-21, 2023

https://www.norcalgastro.org

Postponed Events

Colorectal Cancer is the 2nd leading cause of death in the US. Approximately 5,530 Californians are projected to die from their disease this year alone. We plan to highlight this with a memorial display on the west lawn.

-EVENT POSTPONEMENT-

We regret to inform you that our:

Light the Capitol Blue
An Awareness Rally to Fight Colorectal Cancer
~~March 9, 2023, 12:00-5:00 PM~~ - POSTPONED
West Steps of the Capitol, 1315 10th Street Sacramento, CA

Has Been POSTPONED due to inclement and unpredictable weather.

We are working to reschedule this event for Mid-May.
We will send out a date as soon as a new date is confirmed.

Event updates will be posted on: www.cacoloncancer.org
Email Inquiries: info@cacoloncancer.org

NCSCG LEGISLATIVE CORNER

Ronald Hsu, MD
University of California, Davis School of Medicine

Thank you for electing me to succeed our superstar Dr. Neil Stollman as the American College of Gastroenterology Governor for Northern California in 2019. Advocating for policies that matter to physicians is challenging but fulfilling. By working with the ACG Board of Governors, we can reflect our concerns to policymakers, members of Congress and senators. We galvanize their support to pass bills to help our practice.

At my first BOG meeting in San Antonio in 2019, we addressed the concerns of the high-stakes, every-10-year recertification American Board of Internal Medicine (ABIM) exam for Gastroenterologists. ACG, AASLD, AGA, and ASGE proposed an alternative path for maintaining certification (MOC). After a few years of dialogue between the ACG leadership and ABIM directors in search of an alternative, the ABIM rolled out the new Longitudinal Knowledge Assessment (LKA) program in 2022 that is more appealing to busy practicing clinicians to maintain recertification.

The COVID-19 pandemic coerced ACG to adapt a virtual Advocacy Day DC Fly-in on short notice in April 2020. It was a success. Governors reiterated the message **"WE NEED YOUR HELP: PHYSICIAN PRACTICES ARE STRUGGLING TO TREAT PATIENTS AND MAINTAIN STAFF"** to members of congress. We requested support to continue to deploy all government resources necessary to make PPE available for healthcare providers and facilities. In addition, we discussed the Paycheck Protection Program, which asked to provide direct financial relief to physician practices and ambulatory surgical centers (ASCs), including: (1) One-time grants and low-interest loans as outlined in the bipartisan bill, the "Immediate Relief for Rural Facilities and Providers Act" *(HR 6365; S. 3559)*. (2) Expand the proposal to all physician practices and ASCs, as urban and suburban practices impacted by the surge in COVID-19 cases and government directives to cancel all non-emergency procedures. (3) Increase our patients' ability to access drug infusions at a site (facility/office/home) that best suited them (which was disrupted by COVID-19 closures). We thanked Congress for passing the **Breaking the Barrier Bill** *(HR 1570)* which helped break the barriers for colon cancer screening by waiving out-of-pocket cost sharing after a polyp is found on a screening colonoscopy.

In 2021, at the second Advocacy Day DC Virtual Fly-in, we brought out two bills. (1) **The Safe Step Act** *(S.464; HR 2163)* which amends the Employee Retirement Income Security Act (ERISA) to require certain safeguards and exceptions for any medication step therapy protocol, although it does not apply to Medicare coverage. (2) **Telehealth Bills** *(S.368/HR 1332; HR 366)* aimed at eliminating geographic and originating site restrictions on the use of telehealth in Medicare and establish the patient's home as an eligible site so that patients can receive telehealth care at home and continue to reimburse the service. HR 366: Prevents a sudden loss of telehealth/telephone services for Medicare beneficiaries by authorizing CMS to continue reimbursement /waivers for telehealth 90 days beyond the end of the public health emergency declaration.

Finally, I attended the first in-person ACG Advocacy Day DC Fly-In in 2022. We started the day with a group event and received advocacy tips and guidance from various members of Congress

who are also physicians. Participating in the event were Sen. Bill Cassidy, MD FACG (R-LA), Rep. John Joyce, MD (R-PA), Rep. Kim Schrier, MD (D-WA), Rep. Greg Murphy, MD (R-NC), as well as Rep. Mike Johnson (R-LA).

Our Northern California team held receptive in-person meetings with Dr. Ann Sheehy, Fellow at Speaker Nancy Pelosi's office in CA-12 District, and Ally Hibben, Rep. Tom McClintock's Office staff in CA-04 District. We also met virtually with the teams representing Sen. Alex Padilla CA-S, Rep. Anna Eshoo CA-18, and Rep. John Garamendi CA-03.

We urged Congress to pass the **Safe Step Act** *(S. 464/H.R. 2163),* the **Improving Seniors' Timely Access to Care Act** *(S. 3018/H.R. 3173)*, and to prevent looming Medicare payment rate cuts. We also discussed highlights from ACG's membership survey on prior authorization, the impact on patient care, and G.I. practices. The ACG Prior Authorization Task Force has developed a Practice Management Toolbox for prior authorization template letters.

To overcome the unprecedented trauma and depressive effects of the COVID isolations, I initiated the Bridging Medicine and Music outreach program. With a strong support from ACG leadership and two eminent musicians in Davis, we hosted a colon cancer prevention round table discussion and a special curated baroque concert. ACG presidents and governors presented. I had the opportunity to perform with the Davis Senior High School Baroque Ensemble, directed by Michael Sand and Angelo Moreno. The event was live-streamed to the public on February 19, 2022. We received accolades from both local and international groups.

This year we have two exciting programs. (1) Violinist Rachel Barton Pine performed in support of Colon Cancer Awareness 2023. (2) Working with the California Colorectal Cancer Coalition (C4), American Cancer Society Cancer Action Network, and Fight Colorectal Cancer, I have teamed up to organize a colon cancer awareness rally: Light the Capitol Blue event in Sacramento on March 9, 2023.

The main ceremony includes an introductory orchestra prelude, a tribute to Assembly Member Mike Gipson, author of *AB 342* "Eliminating Cost-Sharing for Colonoscopies" legislation signed into law by Governor Newsom in 2021, removing a critical financial barrier to early detection of colorectal cancer. Speeches by physician leaders, CRC survivors, and advocates will follow. Attendees will have opportunities to take an educational journey through a colon better to understand the development of colorectal cancer in a patient. We will light the capitol blue with 5530 blue flags to honor the 5530 Californians expected to die from colorectal cancer in 2023.

There are many exciting educational and outreach programs we do together. Please feel free to message me at rkhsu@ucdavis.edu on issues that you think ACG can help in your practice. I look forward to hearing from you and meeting you at future meetings.

Ronald Hsu MD, FACG, AGAF, FASGE, FACP, FRCP(Lon), FRCP(Edin)
Governor for Northern California I American College of Gastroenterology
Clinical Professor I University of California Davis School of Medicine

Dear Colleague,

The NCSCG Education and Trainee Committee is pleased to announce the CME Accredited NCSCG and SCSG Education and Trainee Committee 2022-2023 Webinar Series. This year we are excited to collaborate with the Southern California Society of Gastroenterology (SCSG)!

About the NCSCG Webinar Series

The NCSCG Education and Trainee Committee Webinar Series aims to provide an education and career development focused resource for our GI community. Our series has been developed with gastroenterology and hepatology fellows from training programs in Northern California and incorporates sessions specifically focused on important aspects of career development and the job search process. In addition, our series will also include high yield and hot topics in clinical gastroenterology and hepatology. We offer these sessions as a free resource to anyone interested in participating.

To replicate a meal we would have together, the NCSCG would like to offer all NCSCG and SCSG fellows who attend the webinars a meal up to the value of $30 to be eaten at the time of the webinar.

To receive your free meal during the webinar follow these easy steps:

1. Register for the event
2. Ensure that you are an NCSCG or SCSG fellow. You may register as a member or renew your membership by clicking here
3. Attend the webinar (attendance is monitored)
4. Order your meal for the time of the webinar up to the value of $30 and save the receipt!
5. Please turn on your webcam so that we can connect as we dine, converse, collaborate and learn together during this program
6. Fill in an expense reimbursement form sent after each webinar and submit this, along with your receipt to Dani Smith: dsmith@pacemedcom.com
7. Receive a check for the value of your meal, up to $30, mailed to you shortly after the event.

Sincerely,
The NCSCG Education and Trainee Committee

11 May 2023
6PM – 7PM PT
NAFLD/NASH
Nghiem Ha, MD
University of California San Francisco

25 May 2023
6PM – 7PM PT
Advances in Bariatric Endoscopy
Jennifer Phan, MD, University of Southern California
Rabindra Watson, MD, Cedars-Sinai

1 June 2023
6PM – 7PM PT
Understanding Disparities in Chronic Liver Disease and HCC
Robert Wong, MD, MS
Stanford University

June 2023
6PM – 7PM PT
Research Seminar #2

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www/norcalgastro.org/ncscgwebinarseries

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View Past Recorded Webinars Now!

Images in Clinical GI

(Solution and Discussion)

Solution

Sevelamer Crystal Induced Colitis and Ulceration

Discussion

Sevelamer is a crossed-link polyamine anion-exchange non-absorbable resin that binds to phosphate in the gastrointestinal tract.[1] It is commonly used in patients with renal failure for the treatment of hyperphosphatemia. Sevelamer use can be associated with mucosal injury due to deposition of its crystals throughout the gastrointestinal tract. While the most common presentation for sevelamer crystal induced colitis is gastrointestinal bleeding, many have reported abdominal pain, diarrhea, and perforation.[2,3,4] As a non-absorbable resin, sevelamer crystal injury can occur throughout the gastrointestinal tract and has been described in case reports as the culprit for hemorrhagic gastritis and appendicitis.[5,6,7] Biopsy and histology support the diagnosis. Histology reveals "fish scales" pattern crystals. In a case series of 15 pathology specimens containing sevelamer crystal, Swanson et al. found resin related acute mucosa inflammation, chronic inflammation characterized by Paneth cell metaplasia and crypt distortion, inflammatory polyp, ischemia, ulceration, and necrosis.[8] Cautious use of sevelamer is advised in the United States for patients with active mucosal injury such as necrosis, perforation, ulcerative colitis, and GI bleeding, though these are listed as contraindications in Canada.[9]

In our case, the patient's lower gastrointestinal bleeding resolved with supportive care and withdrawal of the culprit medication. She did not require subsequent blood transfusion related to gastrointestinal blood loss. She was given polyethylene glycol to prevent constipation and worsening of her symptoms. Her discharge plan included outpatient flexible sigmoidoscopy in two months to assess for mucosal healing and rule out other etiologies, such as Crohn's disease. Unfortunately, however, she was lost to follow up and passed away from her other comorbidities.

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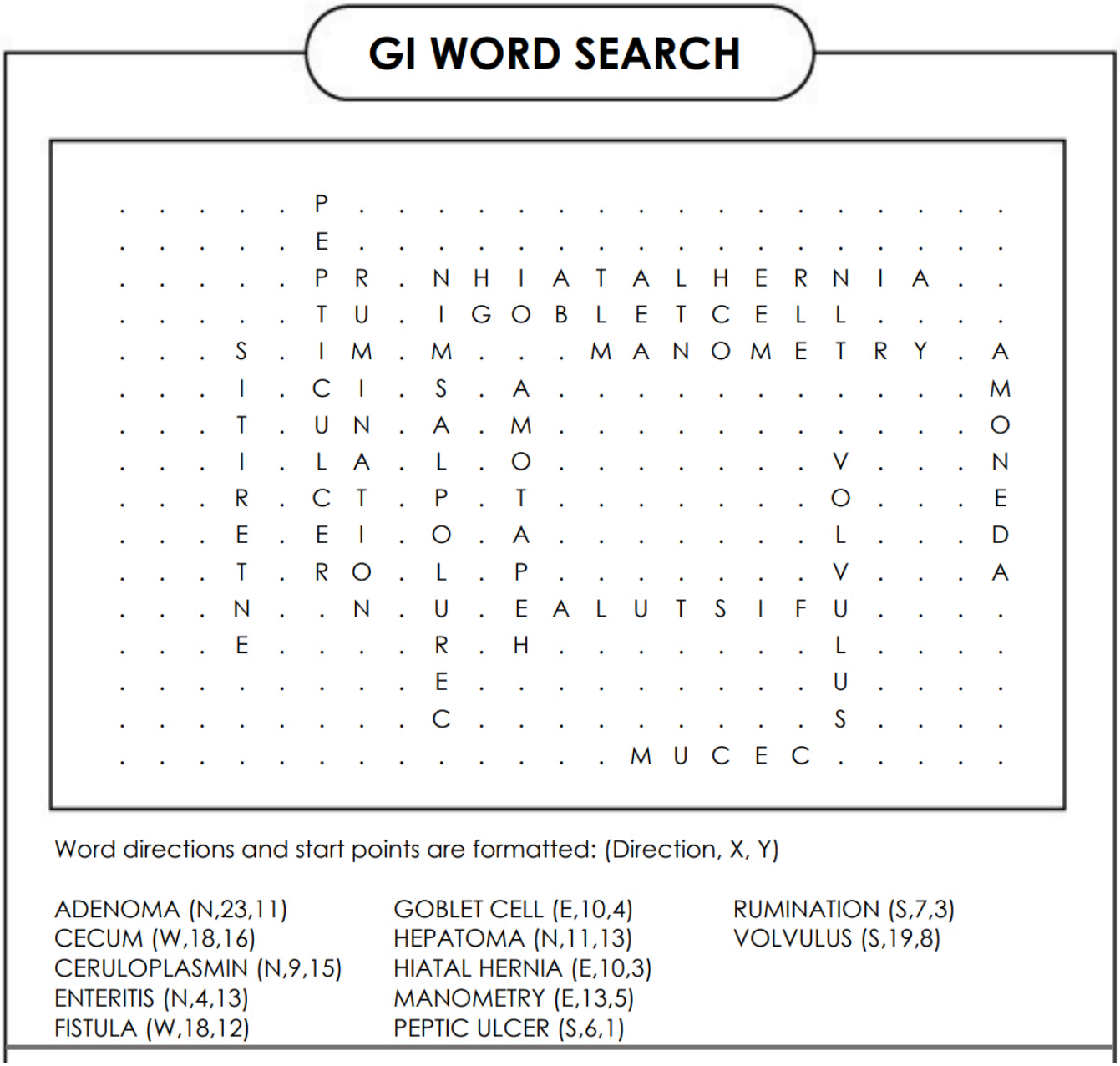
Acknowledgements

We thank Dr. Bandy from CPMC for providing the histologic image, and Dr. Myint for his participation in the case.

SOLUTION



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ADENOMA (N,23,11)
CECUM (W,18,16)
CERULOPLASMIN (N,9,15)
ENTERITIS (N,4,13)
FISTULA (W,18,12)
GOBLET CELL (E,10,4)
HEPATOMA (N,11,13)
HIATAL HERNIA (E,10,3)
MANOMETRY (E,13,5)
PEPTIC ULCER (S,6,1)
RUMINATION (S,7,3)
VOLVULUS (S,19,8)

Northern California Society for Clinical Gastroenterology

About the NCSCG

The Northern California Society for Clinical Gastroenterology ("NCSCG") is a 501(c)(3) non-profit organization devoted to the pursuit of clinical excellence in Gastroenterology and Hepatology, primarily through continuing medical education. By providing a forum for the exchange of ideas, the NCSCG aims to encourage professional growth, stimulate intellectual curiosity, and further patient outcomes by expanding access to up-to-date information of interest to practitioners.

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Membership

The NCSCG is comprised of gastroenterologists and hepatologists from private practices and academic institutions throughout Northern California. Members of NCSCG are offered complimentary registration to our spring and winter educational dinner meetings and discounted registration fees at the GI and Liver symposia. Complimentary membership is offered for fellows.

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