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In this issue



WGO Guidelines Program: An Interview with Professor Guido Tytgat



WDHD: Inflammatory Bowel Disease – Challenges and Hopes in Szczecin, Poland Wojciech Marlicz, MD, PhD, FACG

Adenosine Deaminase (ADA) in Peritoneal Tuberculosis



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Summary

Tuberculosis (TB) is a global public health issue. Peritoneal tuberculosis (PT) is the most common form of abdominal tuberculosis and leading cause of ascites in developing countries. PT has become a real concern in all countries because of the HIV epidemic. Peritoneal tuberculosis is more often seen in patients with advanced renal or liver disease. Although it is an invasive procedure, laparoscopy is still considered to be the gold standard for PT diagnosis. The diagnosis of peritoneal tuberculosis remains a real challenge because of the lack of non-invasive and reliable diagnostic tests. Nowadays, ascitic adenosine deaminase can be a good, non-invasive test for PT diagnosis.

Introduction

Tuberculosis (TB) is a global pandemic caused by Mycobacterium tuberculosis. Tuberculosis can involve all tissues and organs with a large spectrum. Most TB localizations are pulmonary; however, extrapulmonary tuberculosis accounts for about 20 % of total cases ¹. Extrapulmonary TB has increased worldwide due to many factors such as the

1

11





VOL. 22, ISSUE 2

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Expert Point of View

Adenosine Deaminase (ADA) in Peritoneal Tuberculosis

Tahiri Joutei Hassani Mohammed Hliwa Wafaa Badre Wafaa

Editorial

Message from the Editors

Christina M. Surawicz, MD, MACG Mário Reis Álvares-da-Silva, MD, PhD

WCOG at ACG 2017

World Congress of Gastroenterology at ACG2017

WDHD News

New Tools and Resources Released in Support of World Digestive Health Day 2017

WDHD: International Inflammatory Bowel Disease Symposium in Mexico City 13

Jesus K. Yamamoto-Furusho M.D., Ph.D., M.Sc.

WDHD: Inflammatory Bowel Disease – Challenges and Hopes in Szczecin, Poland 15 Wojciech Marlicz, MD, PhD, FACG

WGO & WGOF News

WGO Train the Trainers Marrakech 2017

What do you know about the 'Use and Abuse of Antibiotics in the Microbiota Era'?

Summary of the 15th SGA Annual Meeting

World Gastroenterology Organisation and 'Yogurt In Nutrition Initiative for a balanced diet' Working Together for Supporting You with Your Lactose Intolerance

22

18

20

21



Contents

****	\sim		1 1	Guid	1 1	•
- X Y / I	('()	()	aba	11110		112 00

WGO Guidelines Program: An Interview with Professor Guido Tytgat 24

Calendar of Events

Calendar of Events

27





Continued from first page.

Peritoneal tuberculosis (PT) is the most common form of abdominal tuberculosis and leading cause of ascites in developing countries.

HIV pandemic and malnutrition ^{2,} ³. Abdominal TB is defined by the involvement of gastrointestinal tract and/or peritoneum and/or the mesenteric lymph nodes and it is the sixth most common extrapulmonary site in the United States ⁴. HIV infection is a major risk factor for the development of TB ¹.

Nowadays, ascitic adenosine deaminase can be a good, non-invasive test for PT diagnosis.

Furthermore, patients with underlying end-stage renal disease and continuous ambulatory peritoneal dialysis (CAPD) are at risk to develop PT ⁵.

In Western countries alcoholic liver disease (ALD) seems to be is a significant risk factor of developing PT, whereas in developing countries underlying liver disease is not linked to increased incidence of PT ^{6,7}.

Peritoneal tuberculosis appears to be a consequence of hematogenous spread of Mycobacterium tuberculosis from a primary pulmonary site. Mycobacteria may rarely spread from adjacent organs such as the intestine or the fallopian tubes; ingesting contaminated food such as milk or swallowing the sputum of pulmonary TB can lead to intestinal tuberculosis ⁸.

Clinical features

Peritoneal tuberculosis is a real medical challenge because of its insidious and non-specific symptoms and the variability and paucity of its signs. Unless there is a high index of suspicion, PT diagnosis can easily be delayed or even missed. PT mortality rate is high, ranging from 15 to 30% ⁹. Delay in diagnosis is a major factor for the high mortality from TP ¹⁰.

There are many presentations that will make the diagnosis of this life threatening infectious disease difficult.

PT frequently occurs in patients with comorbid conditions such as renal failure or cirrhosis; this fact further adds to the diagnostic difficulty. Three different forms of peritoneal tuberculosis are described: the wet-ascitic, fibrotic-fixed and the dry-plastic ones ¹¹. The wet-ascitic type is characterized by free or loculated ascites. The fibrotic-fixed type is characterized by abdominal masses composed of mesenteric and omental thickening. The dry-plastic type is characterized by dense adhesions, caseous nodules, and fibrous peritoneal reaction.

Ascites is a common finding except in dry-plastic form. Fever accompanied by night sweats usually occurs in PT whereas absence of fever should not exclude the diagnosis. Weight loss, anorexia and malaise can be also noted in peritoneal tuberculosis.

Vague abdominal pain is a frequent symptom that can be accompanied by abdominal distension or intermittent subacute intestinal obstruction. Diarrhea or constipation are uncommon ¹².

Tenderness on palpation, less often palpable masses, enlarged liver or splenomegaly can be detected by abdominal examination

Ascites is the usual finding. Yet, a small percentage of patients have only very mild ascites, which can only be detected by ultrasonography or during laparoscopy.

The diagnostic approaches

Changes of hematological indices including white cell count, erythrocyte sedimentation rate are non-specific. Usually in PT, the ascitic fluid is straw colored with protein >30g/L, and

total cell count of 500-1500/il, the cells are predominantly lymphocytes (>70%). However, ascitic fluid total protein levels <25 g/L can be seen when PT complicates cirrhosis ⁶. A low serum-ascites albumin gradient (<11 g/L) is seen in 100% of patients with PT but its specificity remains low. Due to its low accuracy, ascitic LDH measurement is not used routinely ¹³.

PT mortality rate is high, ranging from 15 to 30%. Delay in diagnosis is a major factor for the high mortality from TP.

The detection of MT in the ascites fluid is extremely insensitive and Mycobacterium detection is positive on smear in fewer than 3% of cases. A culture is positive in less than 20% of cases and takes 6 to 8 weeks. ^{14, 15}. The polymerase chain reaction (PCR) test is another technique that has been introduced for detecting specific regions of bacterial genome; PCR detection of MTB from ascites fluid samples showed poor sensitivity ¹⁶.

An abnormal chest X-ray can be seen in about 38% of cases, however, coexistent active pulmonary disease is uncommon 14. Ultrasonography can be very useful for PT diagnosis. Intraabdominal fluid, which may be free or encysted, clear or with septae can be seen. In certain cases, only interloop ascites is noticed. Additionally, discrete or matted lymphadenopathy may be concomitant. Abdominal CT scan can be more accurate in demonstrating peritoneal, mesenteric or omental involvement. Commonly, the peritoneum is thickened and nodular; thickened mesentery associated with mesenteric lymph nodes may be seen in early cases ¹⁷. All radiologic findings are nonspecific and cannot confirm the diagnosis. Laparoscopy, an inva-



sive procedure and not exempt from complications, is usually considered as the gold standard for the diagnosis. Laparoscopy allows direct observation of the entire peritoneal space and allows peritoneal biopsies that can detect epithelioid granulomata with caseation. The peritoneal biopsies PCR showed higher diagnostic sensitivity compared to ascitic fluid ¹⁸.

Three categories of laparoscopic appearance can be seen in peritoneal tuberculosis: (i) thickened peritoneum with multiple, yellowish white, and uniform sized (4–5mm) tubercles scattered over the peritoneum; (ii) thickened peritoneum and adhesions; and (iii) markedly thickened peritoneum and multiple thick adhesions fixing intra-abdominal organs. Laparoscopy with combination of visual and histologic study has shown high sensitivity and specificity rates of 93% and 98% respectively 19. But, laparoscopy cannot be performed in approximately 14% of cases due to poor general condition or previous surgery with adhesions 20.

Furthermore, complications can occur in 2.6 to 6.5% of cases including bleeding, infection and intestinal perforation. And laparoscopy mortality can reach 5 % of cases ^{6, 18}.

Moreover, laparoscopy requires a stay in the hospital. It is expensive and is not available in all hospitals in devel-

...it is critical to find alternative non-invasive, rapid accurate tests to diagnose PT.

oping countries. Therefore, it is critical to find alternative non-invasive, rapid accurate tests to diagnose PT.

This brings us to usefulness of ascitic adenosine deaminase (ADA) determination for diagnosis of peritoneal tuberculosis. Among these tests adenosine deaminase (ADA) in the ascitic fluid has been widely studied.

ADA is an enzyme found in lymphocytes, erythrocytes, and in the cerebral cortex ²¹. ADA is a purine-degrading enzyme that catalyzes the deamination of adenosine. Inosine is the result of this reaction. Number, maturation, and stimulation of lymphocytes increase ADA activity in body fluids; thus, ADA activity is increased in body fluids in infections, in rheumatological diseases, and malignant lymphomas ²¹.

Thus, immune cellular response against Mycobacterium tuberculosis intensifies the stimulation and the maturation of lymphocyte and increases ADA levels. In fact, many studies have investigated the diagnostic value of ascitic ADA for PT. In a recent meta-analysis including seventeen studies and 1,797 patients, ascitic ADA determination pooled sensitivity and specificity were 0.93 and 0.94, respectively, for diagnosing PT indicating a high diagnostic accuracy. In this meta-analysis, the diagnostic accuracy was not affected by the study setting (low or high TB prevalence areas) and the ADA cut-off (>35 or <35 U/L) 22.

Former studies had concerns about ADA accuracy in cirrhotic patients ²³. But in more recent studies, ascitic ADA had sensitivity and specificity levels over 90% ^{24, 25}. Ascitic ADA levels can be influenced by HIV infection status, but even if adenosine deaminase levels in PT are lower in HIV positive patients compared to HIV negative patients, ADA still remains useful for PT diagnosis ²⁶. Even if ADA level as

When laparoscopy is not available, not affordable, and if patients are inoperable, ascitic ADA can be crucial to make a quick diagnosis and to start empirical antituberculosis drugs.

Ascitic ADA determination is an accurate, non-invasive, inexpensive, and rapid test that should be considered as a useful routine exam to indicate more invasive procedures such as laparoscopy.

diagnostic criteria for PT is more sensitive than empirical antituberculous therapy ²⁵, in many areas especially in those with high TB prevalence areas, treatment for PT still remains empirical and is only based on clinical judgment ^{24, 27}. When laparoscopy is not available, not affordable, and if patients are inoperable, ascitic ADA can be crucial to make a quick diagnosis and to start empirical antituberculosis drugs ²⁸. Otherwise, ADA can also orient the selection of patients who should have more invasive procedures such as laparoscopy.

Conclusion

PT is a real public health problem in endemic areas and remains a clinical challenge. Ascitic ADA determination is an accurate, non-invasive, inexpensive, and rapid test that should be considered as a useful routine exam to indicate more invasive procedures such as laparoscopy. ADA may be used in very selective cases as an alternative to laparoscopy.

References

- 1. http://www.who.int/tb/publications/globalreport/en/.
- 2. Mehta JB, Dutt A, Harvill L, Mathews KM and all. Epidemiology of extrapulmonary tuberculosis: a comparative analysis with pre-AIDS era. *Chest* 1991; 99: 1134–8
- Braun MM, Byers RH, Heyward WL and al. Acquired immunodeficiency syndrome and extra-pul-



- monary tuberculosis in the United States. *Arch Intern Med* 1990;150: 1913–6.
- 4. Aberg J, Kaplan J, Libman H, et al., HIV Medicine Association of the Infectious Diseases Society of America. Primary care guidelines for the management of persons infected with human immunodeficiency virus: 2009 update by the HIV medicine. Association of the Infectious Diseases Society of America. Clin InfectDis. 2009;49:651-81.
- Lui SL, Tang S, Li FK, et al. Tuberculosis infection in Chinese patients undergoing continuous ambulatory peritoneal dialysis. *Am J Kidney Dis* 2001; 38: 1055–60.
- Shakil AO, Korula J, Kanel GC, et al. Diagnostic features of tuberculous peritonitis in the absence and presence of chronic liver disease: a case control study. *Am J Med* 1996; 100: 179-85.
- 7. Mimica M. The usefulness and limitations of laparoscopy in the diagnosis of tuberculous peritonitis. *Endoscopy* 1992; 24: 588–91.
- Fitzgerald D, Sterling T, Haas W. Mycobacterium tuberculosis. In: Mandell: Douglas and Bennett's. Principles and practice of infectious diseases. Churchill Livingstone; 2010. p. 3129-63.
- 9. Dineen P, Homan WP, Grafe WR. Tuberculous peritonitis: 43 years' experience in diagnosis and treatment. *Ann Surg* 1976; 184: 717–22.
- 10. Chow KM, Chow VC, Hung IC, at al. Tuberculous peritonitis-associated mortality is high among patients waiting for the results of mycobacterial cultures of ascitic fluid samples. *Clin Infect Dis* 2002;35:409-413.
- 11. Bhargava DK, Shriniwas, Chopra P, et al. Peritoneal tuberculosis:

- laparoscopic patterns and its diagnostic accuracy. *Am J Gastroenterol* 1992; 87: 109–12.
- Sanai FM, Bzeizi KI. Systematic review: tuberculous peritonitis

 presenting features, diagnostic strategies and treatment. Aliment Pharmacol Ther 2005; 22: 685–700.
- 13. Vardareli E, Kebapci M, Saricam T, et al. Tuberculous peritonitis of the wet ascitic type: clinical features and diagnostic value of image-guided peritoneal biopsy. *Dig Liver Dis* 2004; 36: 199–204.
- 14. Marshall JB. Tuberculosis of the gastrointestinal tract and peritoneum. *Am J Gastroenterol* 1993; 88: 989-999.
- 15. Debi U, Ravisankar V, Prasad KK et al. Abdominal tuberculosis of the gastrointestinal tract: revisited. *World J Gastroenterol* 2014;20:14831-40.
- 16. Rufai SB, Singh S, Singh A et al. Performance of Xpert MTB/RIF on ascitic fluid samples for detection of abdominal tuberculosis. *J Lab Physicians* 2017;9:47-52.
- Gulati MS, Sarma D, Paul SB. CT appearances in abdominal tuberculosis. A pictorial assay. *Clin Imaging* 1999; 23: 51-59.
- Hong KD, Lee SI, Moon HY. Comparison between Laparoscopy and Noninvasive Tests for the Diagnosis of Tuberculous Peritonitis. World J Surg (2011) 35:2369–2375.
- 19. Coupland GA, Townend DM, Martin CJ. Peritoneoscopy--use in assessment of intra-abdominal malignancy. *Surgery* 1981; 89: 645-649.
- 20. Kang SJ, Kim JW, Baek JH. Role of ascites adenosine deaminase in differentiating between tuberculous peritonitis and peritoneal carcinomatosis. World J Gastroenterol 2012 June 14; 18(22): 2837-2843.
- 21. Bhargava DK, Gupta M, Nijhawan S et al. Adenosine deaminase

- (ADA) in peritoneal tuberculosis: diagnostic value in ascitic fluid and serum. *Tubercle* 1990;71:121–6.
- 22. Tao L, Ning HJ, Nie HM et al. Diagnostic value of adenosine deaminase in ascites for tuberculosis ascites: a meta-analysis. *Diagnostic Microbiology and Infectious Disease* 79 (2014) 102–107.
- 23. Hillebrand DJ, Runyon BA, Yasmineh WG et al. Ascitic fluid adenosine deaminase insensitivity in detecting tuberculous peritonitis in the United States. *Hepatology* 1996; 24: 1408–12.
- 24. Liao YJ, Wu CY, Lee SW et al. Adenosine deaminase activity in tuberculous peritonitis among patients with underlying liver cirrhosis. *World J Gastroenterol* 2012 October 7; 18(37): 5260-5265.
- 25. Burgess LJ, Swanepoel CG, Taljaard JJF. The use of adenosine deaminase as a diagnostic tool for peritoneal tuberculosis. *Tuberculosis* 2001; 81: 243–8.
- 26. Ribera E1, Martínez Vásquez JM, Ocaña et al. Diagnostic value of ascites gamma interferon levels in tuberculous peritonitis. Comparison with adenosine deaminase activity. *Tubercle* (1991) 72. 193-1977.
- 27. Gupta BK, Bharat V, Bandyopadhyay D. Sensitivity, Specificity, Negative and Positive Predictive Values of Adenosine Deaminase in Patients of Tubercular and Non-Tubercular Serosal Effusion in India. *J Clin Med Res*. 2010;2(3):121-126.
- 28. Guirat A, Koubaa M, Mzali R. Peritoneal tuberculosis. *Clinics and Research in Hepathology and Gastroenterology* (2011) 35, 60—69.

Message from the Editors



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Tuberculosis (TB) is an important global public health problem in the developing world. The most common form of abdominal TB is peritoneal TB. Diagnosis is a challenge as it involves invasive procedures like laparoscopy. A less invasive reliable diagnostic test is much needed. In this issue, Drs. Tahiri Joutei Hassani Mohammed, Associate Professor of Gastroenterology, Hliwa Wafaa, Professor of Gastroenterology and Badre Wafaa , Professor of Gastroenterology, all from the Medicine School of Casablanca – Hassan II University provide information about the usefulness of measuring adenosine deaminase in the peritoneal fluid. They provide a clinically relevant review of this common GI problem. We know you will find it informative.

This year's WDHD focus is on inflammatory bowel disease. This issue features summaries of WDHD events in Poland and Mexico that you will find noteworthy.

In addition, an interview with Dr. Guido Tytgat tells the story of the development of the important Guidelines of the WGO.

Finally, we hope to see many of you in Orlando for the historic meeting of the WGO and American College of Gastroenterology. The World Congress of Gastroenterology at ACG2017 (WCOG at ACG2017) takes place from 13-18 October, 2017. Details are available at http://worldcongressacg2017.org/.

Chris and Mario.



World Congress of Gastroenterology at ACG2017

WORLD CONGRESS of GASTROENTEROLOGY @ACG2017 OCTOBER 13-18, 2017 | ORANGE COUNTY CONVENTION CENTER, ORLANDO, FLORIDA

We hope you are planning on joining us at the World Congress of Gastroenterology at ACG2017 (WCOG at ACG2017) in Orlando, Florida, USA from 13-18 October, 2017. A partnership of the World Gastroenterology Organisation (WGO) and the American College of Gastroenterology (ACG), the WCOG at ACG2017 offers a unique platform and the opportunity to meet and network with a truly international audience. Notably, in a first for a World Congress of Gastroenterology, a number of sessions will be presented in Spanish or in English with simultaneous interpretation into Spanish (headsets will be available). Additionally we will feature the "Best of Original Latin American Research (Free Papers/ Abstract Presentations)" session on Wednesday, 18 October.

Invite your colleagues to WCOG at ACG2017

Once you have registered for WCOG at ACG2017, be sure to ask your colleagues to join you by downloading the following image to post via Twitter, LinkedIn or Facebook and use hashtag #WCOGatACG2017. Don't forget to include the meeting website link when you post. Suggested copy to post, "Join me at WCOG at ACG2017. Visit world-congressACG2017.org to learn more. #WCOGatACG2017."



- Image for use on Facebook – http://worldcongressacg2017.org/wp-content/ uploads/2017/08/17ACG-JoinMe-Facebook-Going.jpg
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 ACG2017-Twitter-Going.png
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Make sure you follow the WGO social media accounts below, to see other colleagues who are attending WCOG at ACG2017!

WGO

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Facebook: @AmCollegeGastro https://www.facebook.com/Am-CollegeGastro Twitter: @AmCollegeGastro https://twitter.com/AmCollegeGastro LinkedIn: https://www.linkedin.com/company/american-college-of-gastroenterology

Preliminary Program

The Preliminary Program for the WCOG at ACG2017, featuring the agendas for all courses, the Scientific Meeting, workshops, luncheons and receptions, as well as the sessions that will be available in Spanish, is available online here at http://world-congressacg2017.org/wp-content/uploads/2017/07/ACG17 Prelim Program web.pdf. Some of the highlights include:

Friday, 13 October

- GI Pathophysiology Course
- WGO-ASGE Endoscopy Course: Viva Endoscopy!
- Practice Management Course: Future World: Taking Ownership During Changing Times
- What's New in GI Pharmacology Course
- Trainees' Workshops: Navigating, Networking, and Negotiating Your First Job

Saturday, 14 October

- Postgraduate Course: Global Approach to Optimal Management of GI Disorders
- David Sun Lecture
- GI Jeopardy Competition

Sunday, 15 October

- Postgraduate Course
- Hands-on Endoscopy Workshop Center



Monday, 16 October

- ACG's Presidential Address
- Hands-on Endoscopy Workshop Center
- 5th Annual Endoscopy Video Forum
- ACG-FDA Public Forum
- WGO's Presidential Address
- WGO's Bockus Lecture
- American Journal of Gastroenterology Lecture

Tuesday, 17 October

- Plenary Sessions
- Hands-on Endoscopy Workshop Center
- ACG's J. Edward Berk Distinguished Lecture
- ACG's Emily Couric Memorial Lecture
- WGO's Brohée Lecture

Wednesday, 18 October

- Plenary Sessions
- ACG's David Y. Graham Lecture



5-8 December, Bangkok





Global Perspectives in Gastroenterology

- A platform for global exchange of thoughts and expertise in the City of Angels, Bangkok
- An event for networking among the digestive disease practitioners
- A place to find out the latest state of the art technology and best practices
- An occasion to meet new friends and rekindle old friendship

SAVE DATE













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New Tools and Resources Released in Support of World Digestive Health Day 2017

World Gastroenterology Organisation (WGO) is pleased to announce the release of new tools and resources in support of World Digestive Health Day (WDHD) 2017. The WDHD 2017 Steering Committee, led by WDHD 2017 Chairman, Dr. Charles Bernstein (Canada), provides a global expert perspective through answers to Frequently Asked Questions (FAQs) about Inflammatory Bowel Disease (IBD) for Patients and for Physicians.

FAQs About IBD for Patients



To access the questions and answers for Patients in an interactive format or to download a PDF version of the FAQs, visit http://www.worldgastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources/frequently-asked-questions-about-ibd-for-patients.

FAQs About IBD for Physicians



To access the questions and answers for Physicians in an interactive format or to download a PDF versions of the FAQs, visit http://www.worldgastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources/frequently-asked-questions-about-ibd-for-physicians.

Additional Tools and Resources

WGO has developed additional tools and resources to support WDHD 2017 and raise awareness of Inflammatory Bowel Disease (IBD). We invite you to regularly visit, http://www.worldgastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources, as NEW translations of WDHD 2017 tools and resources will be available soon!

Aims of the Campaign



To access the Aims of the Campaign flyer or to download a PDF version, visit http://www.worldgastroenter-ology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources#InfoSheet.

10 Tips for People Living with IBD



To access the 10 Tips for People Living with IBD flyer or to download a PDF version, visit http://www.world-gastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resourc-es#10 Tips Flyer.

The WGO Global Guideline and Cascade on IBD is featured as a useful resource for WDHD 2017, as well. The Global Guideline and Cascade is available in English, French, Mandarin, Portuguese, Russian and Spanish.

WGO Supporting Global Guideline and Cascade on IBD



To access the guideline or to download a PDF version, visit http://www.worldgastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources#IBD Guideline.

To extend the reach of the campaign, WGO enlists the support of our Member Societies, Training Centers, Regional Affiliate Associations and organizational partners.

Discover How Our Colleagues Support WDHD 2017

To extend the reach of the campaign, WGO enlists the support of our Member Societies, Training Centers, Regional Affiliate Associations and organizational partners. Contributions from our colleagues this year include a blog post and a video. Select the respective link below to view their contributions!

American College of Gastroenterology (ACG) Blog Post - http://www.worldgastroenterology.org/wgo-foun-dation/wdhd/wdhd-2017/tools-and-resources#ACG Blog

United European Gastroenterology (UEG) IBD Journey Video - http://www.worldgastroenterology.org/wgo-foundation/wdhd/wdhd-2017/tools-and-resources#UEGVideo

To show your continued support for WDHD 2017 on social media, join the conversation and interact with WGO by snapping, posting and sharing original photos and videos of your WDHD celebrations.

Join the WDHD 2017 Conversation

To show your continued support for WDHD 2017 on social media, join the conversation and interact with WGO by snapping, posting and sharing original photos and videos of your WDHD celebrations. Tag WGO on Facebook (World Digestive Health Day - WDHD) and/or Twitter (@WGOF_WDHD), and include the hashtags #WDHD2017 and #Yearo-fIBD in your posts. We are interested to see how you are TAKING ACTION for IBD!

About WDHD 2017

Every 29 May, the World Gastroenterology Organisation (WGO) celebrates World Digestive Health Day (WDHD) and initiates a worldwide, public health campaign through its more than 100 member societies and regional affiliates which reach over 50,000 individual gastroenterologists, Led by Chairman, Dr.
Charles Bernstein (Canada),
the goal of the WDHD
2017 campaign is to raise
awareness of Inflammatory
Bowel Disease, a group
of idiopathic chronic
inflammatory intestinal
conditions.

hepatologists, GI surgeons, and other health care professionals worldwide. Each year focuses upon a particular digestive or liver disorder, with the focus for 2017 being Inflammatory Bowel Disease (IBD).

Led by Chairman, Dr. Charles Bernstein (Canada), the goal of the WDHD 2017 campaign is to raise awareness of Inflammatory Bowel Disease, a group of idiopathic chronic inflammatory intestinal conditions. WDHD aims to provide a broad overview of this increasingly common disease by providing gastroenterologists, their patients and the lay public, with an understanding of the latest basic and clinical research in the pathogenesis, investigation, and treatment of IBD. 'Inflammatory Bowel Disease (IBD): Navigating Evolving Therapies in an Evolving Disease' is the WDHD campaign theme for 2017 and seeks to translate research into clinical practice and facilitate communication between physicians, pharmacists, allied health professionals, healthcare payers, and the public.



Inflammatory Bowel Disease

WDHD: International Inflammatory Bowel Disease Symposium in Mexico City



Jesus K. Yamamoto-Furusho M.D., Ph.D., M.Sc.

Founder and Director of the Inflammatory Bowel Disease Clinic, Department of Gastroenterology, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City Professor of IBD Fellow at the National Autonomous University of Mexico (UNAM)

President of the Pan American Crohn´s and Colitis Organisation

The International Symposium of Inflammatory Bowel Disease (IBD) was organized by Prof. Jesús K. Yamamoto-Furusho to celebrate the 10th anniversary of the IBD Clinic Foundation in the Department of Gastroenterology at the National Institute of Medical Sciences and Nutrition Salvador Zubirán (INCMNSZ) Hospital, as well as World Digestive Health Day (WDHD) focusing on IBD. It was held on 27 January, 2017 in Mexico City.

(PANCCO)

Participating in the inaugural session were Dr. David Kershenobich, General Director of INCMNSZ, Dr. Luis Uscanga, Chief of the Depart-

There were 301
participants from across
the country in different
fields related to IBD such
as gastroenterologists,
colorectal surgeons,
radiologists,
gastrointestinal
endoscopists,
psychologists, pathologists,
nutritionists, social
workers, rheumatologists,
dermatologists and
ophthalmologists.

ment of Gastroenterology, Dr. Aurelio López, President of the Asociación Mexicana de Gastroenterología, and Prof. Jesús K. Yamamoto-Furusho, the founder and director of the IBD Clinic at INCMNSZ as well as President of the Pan American Crohn's and Colitis Organization (PANCCO).

This symposium was a great success due to high-quality lectures and novel topics in IBD. There were 301 participants from across the country in different fields related to IBD such as gastroenterologists, colorectal surgeons, radiologists, gastrointestinal endoscopists, psychologists, pathologists, nutritionists, social workers, rheumatologists, dermatologists and ophthalmologists.

The IBD symposium consisted of two parts. The first focused on the medical community and had nine lectures with several topics about new aspects of the pathogenesis, biomarkers in the monitoring of IBD patients, scientific contributions of the IBD clinic at the INCMNSZ, novel endoscopic tools for the diagnosis and follow-up, outcomes of the antitumor necrosis factor alpha (anti-TNFa) therapy, the use of anti-TNFa biosimilars, new biological therapies and personalized medicine in patients with IBD. These lectures were pro-

vided by international experts (Hillary Steinhart and Guillermo Veitia from Canada and Venezuela, respectively) and national professors (Gabriela Fonseca, Francisco Bosques, Rafael Barreto, Ylse Gutiérrez and Jesús K. Yamamoto-Furusho).

The second part of the symposium was dedicated to patients with IBD and included approximately 100 attendees from the two main IBD patient associations named "Living with Crohn and CUCI" as well as the National Association of IBD. All lectures covered such topics as understanding IBD's psychological and nutritional aspects. The participants also related their own personal experiences.

Finally, it is important to mention that the IBD Clinic at INCMNSZ was founded on January 2007 and its aims are focused on clinical, academic and research activities. Currently, this clinic provides more than 1,000 medical consultations per year, an advanced IBD fellowship course and participation in national and international meetings. To date the clinic has published around 90 original and review scientific papers.

The international IBD symposium was endorsed by the National Institute of Medical Sciences and Nutrition Salvador Zubirán Hospital, the Asociación Mexicana de Gastroenterología and the Pan American Crohn's

IBD patient associations must work in collaboration with physicians to increase the communication about the knowledge of this disease and to reduce the fear of having IBD.

and Colitis Organization. It was also supported by Abbvie, Farmasa, Ferring and Takeda laboratories.

In conclusion, these kind of activities can increase the awareness of the IBD in the medical community in developing countries for improving the diagnosis and treatment in early stages of the IBD in order to get a better quality of life by reducing hospitalizations and surgeries. Additionally, IBD patient associations must work in collaboration with physicians to increase the communication about the knowledge of this disease and to reduce the fear of having IBD.

au

WDHD: Inflammatory Bowel Disease – Challenges and Hopes in Szczecin, Poland



Wojciech Marlicz, MD, PhD, FACG

Department of Gastroenterology, Pomeranian Medical University in Szczecin;

European Lifestyle Medicine Organization, Szczecin, Poland



More than 300 participants gathered to listen to lectures at WDHD 2017, Szczecin, Poland.

Inflammatory bowel disease (IBD) is an umbrella term for chronic gastrointestinal, debilitating pathologies including ulcerative colitis (UC) and Crohn's disease (CD).

Inflammatory bowel disease (IBD) is an umbrella term for chronic gastro-intestinal, debilitating pathologies including ulcerative colitis (UC) and Crohn's disease (CD). IBD negatively impacts the patient's quality of life and, as the incidence and prevalence are increasing, its global emergence as a disease is among the major medical concerns in modern societies. The number of CD registered cases in the Polish Registry of Crohn's disease exceeds 6,600 patients.

We do believe that the number of patients with IBD in Poland exceeds 15,000 with CD and 40,000 with UC. More than 70% of them are younger than 35 years of age. All of them are at risk of developing complications and disability over the years. As the etiology is complex, so is the management. Modern patient care should be multidisciplinary and include medical practitioners, dietitians, physical therapists, pharmacists and caregivers. Moreover patients themselves already support activities and

Modern patient care should be multidisciplinary and include medical practitioners, dietitians, physical therapists, pharmacists and caregivers.

influence the health decision-makers with the power to change current paradigms, frequently through determined efforts and persistent work for their associations.

Therefore, our teams at the Department of Gastroenterology, Pomeranian Medical University in Szczecin, the Polish Celiac Society and the European Lifestyle Medicine Organization (ELMO), in collaboration with Polish Society of Gastroenterology, together and under the auspices of the World Gastroenterology Organisation (WGO), aimed to raise awareness of IBD among medical practitioners, dieticians, pharmacists, student doctors and lay people.

In May 2017 the World Digestive Health Day Conference: "IBD – Challenges and Hopes" took place in Szczecin. Many collaborators joined our WDHD campaign. Among them



Faculty and attendees of World Digestive Health Day 2017 Poland "Inflammatory Bowel Diseases – Challenges and Hopes



Organizing committee WDHD 2017 Szczecin, Poland. In the middle Mrs. Jolanta Meller (Polish Celiac Society) and Dr. Wojciech Marlicz (Pomeranian Medical University; European Lifestyle Medicine Organization, Poland)

were West-Pomeranian Divisions of Polish Society of Gastroenterology and Polish Society of Surgeons, Collegium of Family Physicians, Polish Society for Parenteral, Enteral Nutrition and Metabolism (POLSPEN), Warsaw and Szczecin Divisions of International Federation of Medical Students Associations IFMSA-Polska (IFMSA is the biggest student association uniting students from 121 countries) as well as patients' associations: "J-elita" (Polish Association Supporting IBD Patients) and "Appetite for Life" (an association of patients with disabilities of the digestive system, with special attention to persons who require special and chronic enteral and parenteral nutrition). We were also proud to have the support of one of the biggest social IBD campaigns in Poland – <u>flakirozrabiaki.org</u> – led by famous celebrities, Agata Młynarska among them.

Notable governmental bodies and scientific institutions welcomed our invitation to serve as Honorary Patrons of the WDHD conference. These included the City Council of Szczecin, the Presidents of Pomeranian Medical University and West Pomeranian University of Technology, Regional Chamber of Physicians, Regional Chamber of Nurses and Midwives, West Pomeranian Chamber of Pharmacies, Polish Society of Laboratory Diagnostics, West Pomeranian Divisions of Polish Society of Pharmacology and Polish Pharmaceutical Society. Together we aimed to highlight the topics of IBD related to, but not limited to, disease diagnosis, management and prognosis. Also

the importance of prevention and lifestyle-related habits (e.g. nutrition, physical activity, stress management) in IBD care were covered.

Our event assembled more than 300 participants to whom short (15 minutes) state of the art lectures were presented. Leading scientists and medical practitioners of different scientific fields delivered lectures which revolved around various topics. The wide social interplays on IBD impact were discussed. Special attention was paid to the role of nutrition (clinical and ambulatory), intestinal microbiota and autoimmune comorbidities such as celiac disease, Hashimoto's or rheumatic conditions.

...research in the fields of microbiome, stem cell and e-health will offer personalized solutions to the IBD community in the near future.

The opening lecture titled "Inflammatory Bowel Diseases – challenges and hopes" was delivered by Dr. Wojciech Marlicz (Department of Gastroenterology, PUM, Szczecin). Dr. Marlicz raised the problem of difficulties in translating science from bench to bedside, the process which generates uncertainties among medical practitioners. On the other hand, Dr. Marlicz expressed the belief that research in the fields of microbiome, stem cell and e-health will offer personalized solutions to the IBD community in the near future.

Prof. Rydzewska presented the current recommendations issued by the Polish Society of Gastroenterology on IBD management in outpatient settings...

The next lecture was delivered by Professor Grażyna Rydzewska, President of the Polish Society of Gastroenterology (Department of Gastroenterology, Central Hospital, Warsaw). In her presentation "The role of general practitioner in the management of patients with IBD" Prof. Rydzewska presented the current recommendations issued by the Polish Society of Gastroenterology on IBD management in outpatient settings, dedicated to general practitioners in our country.

Prof. Ewa Stachowska (Department of Biochemistry and Human Nutrition, PUM, Szczecin) in her lecture "Feed your microbiome" taught us what to eat and which foods to avoid to maintain healthy gut.

Marek Witkowski (Euroimmun Polska) informed the audience how to monitor celiac patients on gluten free diets.

Mrs. Jolanta Meller (Polish Celiac Society) in her lecture "Drop drills the rock" convinced us that having persistence pays off by presenting the significant growth of the Polish Celiac Society in recent years and its role



Wojciech Marlicz, MD, PhD, FACG and Marek Lichota (Founder and President of Patients' Association "Appetite for Life")

among people on gluten-free diets in Poland.

Professors Dariusz Bielicki and Teresa Starzyńska (Department of Gastroenterology, Pomeranian Medical University in Szczecin) warned us about causes of chronic diarrhea from other than IBD: "Chronic diarrhea – differential diagnosis based on clinical case presentation."

Anna Żuk, clinical nutritionist (Silesian Medical University in Katowice) served as a professional guide to clinical nutrition: "Clinical nutrition – in an eye of the hospital pharmacist."

Mr. Lichota gave an eyecatching overview of the role of organizations of patients with digestive system insufficiencies in support of IBD patients with special nutritional requirements.

The lecture by Marek Lichota, founder and president of the "Appetite for Life Association," gained our special attention. In his short but very informative presentation, Mr. Lichota gave an eye-catching overview of the role of organizations of patients with digestive system insufficiencies in support of IBD patients with special nutritional requirements. Mr. Lichota, a Crohn's patient himself, has been left with only 80 cm of his small intestine, being completely dependent on parenteral nutrition. His speech, an almost Nick Vujicic-like inspirational talk, was not only heart breaking, but also full of positive energy and motivation to every person in IBD community.



The attendees at the conference break, WDHD 2017, Szczecin, Poland

Next, Łukasz Fraszka (ALAB) informed us about the value of stool calprotectin testing in everyday medical practice.

Zuzanna Jankiewicz (Twisted Cafeteria – The Lab of Healthy and Artistic Pastries) called on us not to fear the elimination diets: "Elimination diet, why not?"

After the discussion and brainstorming breaks, the conference featured more distinct and creative speakers. Dr. Katarzyna Fischer (The Diagnostic Rheumatology Lab, Pomeranian Medical University in Szczecin) discussed the role of serologic tests in the diagnosis of IBD.

Our conference could not have taken place without also hearing from our leading scientist, Dr. Karolina Skonieczna-Żydecka (Department of Biochemistry and Human Nutrition, PUM). In a very creative way Dr. Żydecka introduced the audience to the medical term "gut barrier." In her lecture "Gut barrier" the role in the pathogenesis, diagnosis and therapy of functional gastrointestinal disorders, the mechanisms of interplay between environmental factors and gut microbiota, neuroimmune and hormonal systems were discussed.

The next lecture was delivered by Dr. Romana Kosik-Warzyńska (J-elita, Szczecin), who informed the attendees about novel therapies available for IBD patients in West-Pomeranian district in Poland.

Anna Prawdzic-Wondek (SAN-PROBI) then discussed the benefits of gluten-free probiotics.

Last, but not least, we heard from our famous blogger at <u>natchniona.pl</u>, Weronika Madejska, who took us on the journey "No gluten, no cry" of her personal success in the internet community. Through her passion and persistence, offering health dietary recipes to people in need, she gained much respect and fame not only among the internet community and bloggers but also professional journalists in Poland.

After the final lecture, the group photo was taken. The World Digestive Health Day 2017 was offered free of charge to the public as well as medical practitioners. We made a significant effort to distribute posters, leaflets and invitations in person, over the internet, as well as through social media. Our personal communication skills were the assets to convince the lay public and industrial partners to support the WDHD event. Participants of the conference were invited to taste a wide range of healthy and organic food offered by local manufacturers. We are looking forward to continuing our collaboration with the World Gastroenterology Organisation for the benefit to IBD communities and all other patients.

WGO Train the Trainers Marrakech 2017



Countries represented at TTT Marrakech

WGO is proud to announce the first French language Train the Trainers workshop a resounding success! Since Train the Trainers began in 2001, over 1,000 educators have attended this unique program to hone their skills in adult education. The 25th WGO Train the Trainers (TTT) workshop took place this past 26-29 April 2017 in Marrakech, Morocco. This interactive workshop was organized by the World Gastroenterology Organisation (WGO) and the WGO Rabat Training Center with support from the Société Nationale Française de Gastro-Entérologie, Société Marocaine Des Maladies de L'Appareil Digestif, and the American College of Gastroenterology. It was made up of 17 modules, included lectures, small group discussions, and hands-on ses-sions while creating the opportunity for everybody to engage in an open discussion on many topics related to teaching and training.



Professors Naima Amrani and Damon Bizos lead the participants through the end of workshop TTT Quiz, where all their knowledge from the past 4 days was tested



Professor Naima Amrani introducing the teambuilding event to the participants

...being the first
Francophone workshop, it
opened the WGO Train the
Trainers program to many
societies the opportunity
to send participants for the
first time to experience the
workshop in their native
language.

The 2017 TTT Marrakech workshop was a fine addition, because, being the first Francophone workshop, it opened the WGO Train the Trainers program to many societies the opportunity to send participants for the first time to experience the workshop in their native language . Marrakech received participants and faculty from 19 different societies including 12 participants from GI societies that have never before participated in a Train the Trainers workshop.

In particular, TTT Marrakech 2017 was an intensive four-day course focused on improving the abilities and educational skills of trainers in the field of digestive health. Marrakech 2017 brought together renowned faculty members from WGO (trainers) and participants (trainees) from 21 different countries and settings around the

Marrakech 2017 brought together renowned faculty members from WGO (trainers) and participants (trainees) from 21 different countries and settings around the world...

world, in an enabling environment to improve their potential for teaching.

Going beyond seminars, the workshop also sought to bring the participants and faculty together through a variety of teambuilding and small group activities that highlighted the beauty and history of Moroccan culture. The venue itself was opulent and rich in Moroccan architecture, and all attendees were treated to the best of Marrakech by their kind Moroccan hosts.

A truly once-in-a-lifetime workshop, the invaluable impact of the training and guidance provided on the field of adult education combined with the breathtaking adventure that is Marrakech is hard to put into words. Moved by her experience, Doctor Claudia Milano, who participated from Argentina, inspires us all with a memento of TTT in prose. In keeping with the spirit of the first Francophone TTT, please find it in its original French side-by-side with the English translation.



Marrakech 2017 Participants, Faculty, and Staff

RÉUNION T.T.T. MARRAKESH 2017

Les organisateurs du T.T.T nous ont demandé, si possible, "quelques mots" sur la dernière réunion.

En français, on dit "quelques mots" pour trouver des "paroles" capables de transmettre un message clair, fort, même pas un compte rendu.

"Quelques mots"...c'est tellement difficile ...Comment transmettre par écrit, (oui, seulement par écrit ..malheureusement, il n'y a pas de gestuelle) tout ce qu'on y a vécu???

Les paroles, elles sont si belles.. mais elles ne me sont pas suffisantes aujourd'hui.

Comment raconter cette expérience scientifique et tellement humaine comprenant les échanges entre les apprenants et les profs ?

Les gestes, les regards, les sourires, les travaux en groupe, les mots en anglais qui m'échappaient dans la langue de Molière et qui me faisaient rougir d'Honte (à cet âge, moi..!)

La pratique des présentations, les travaux en groupe, les discussions dans une ambiance qui sentait au thé à la menthe...

Quelle expérience ! J'y ai connu de grands profs, qui, avec une précision extraordinaire, ont expliqué ce qu'on croyait savoir mais qui n'était pas encore «au bouts des doigts»

Des «copains» d'un monde presque inconnu pour moi, qui m'ont beaucoup appris, des personnes incroyables avec lesquelles on a tricoté un long fil qui arrive à nous lier. «un cadeau du ciel»

Le fait de rencontrer Naïma, ancienne copine en France et de connaître sa charmante fille Laila a fait battre mon cœur...

Et finalement, savoir passer aux autres, â nos élèves, à nos apprenants, ce qu'on a vécu. Les expériences, soient scientifiques soient culturelles et humaines, sont comme une pierre chaude: si on la garde pour soi-même, on finit pour se brûler.

Transmettre. transmette, transmettre ..! et encourager les jeunes pour répéter cette expérience extraordinaire

Mille fois merci et toutes mes félicitations à tous!!!



Doctor Claudia Milano, Sociedad Argentina de Gastroenterología

T.T.T. MEETING MARRAKESH 2017

The organizers of T.T.T asked us, if possible, "a few words" on the last meeting.

In French, we say "a few words" to find "words" able to convey a clear, strong message, not even a report.

"A few words" ... it is so difficult ... How to transmit in writing, (yes, only in writing. unfortunately, there is no gesture) all that we lived there???

The lyrics are so beautiful ... but they are not enough for me today.

How can we recount this scientific and human experience that includes exchanges between learners and teachers?

Gestures, looks, smiles, group work, words in English that escaped me in Moliere's tongue and made me blush with shame (at that age, me!).

The practice of presentations, group work, discussions in an atmosphere that smelled of mint tea ...

What an experience! I have known great teachers who, with extraordinary precision, explained what they thought they knew but who were not yet "at the fingertips"

"Buddies" of a world almost unknown to me, who taught me a lot, incredible people with whom we knitted a long thread that comes to bind us. "a gift from heaven"

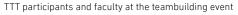
The fact of meeting Naïma, a former girlfriend in France and knowing her lovely daughter Laila made my heart beat ...

And finally, knowing how to pass on to others, to our students, to our learners, what we have experienced. Experiments, whether scientific, cultural or human, are like a hot stone: if we keep it for ourselves, we end up burning ourselves.

Beam. Transmit, transmit ..! And encourage young people to repeat this extraordinary experience

A thousand thanks and congratulations to all!!!







A major focus of every TTT is moving participants out of watching seminars and into working on small group presentations.

What do you know about the 'Use and Abuse of Antibiotics in the Microbiota Era'?

MICROBIOTA HARD TALKS LIVE FROM TEXAS MEDICAL CENTER

The second webinar of the 'Microbiota Hard Talks - Live from Texas Medical Center' webinar series, "Use and Abuse of Antibiotics in the Microbiota Era" was broadcast live on Friday, 7th July, 2017 from the Texas Medical Center in Houston, Texas, U.S.A. The webinar was presented by Professor of Medicine, Pathology, and Laboratory Medicine, Eli and Edythe Board Chair of Medicine, Chair of Research at the Division of Digestive Diseases and the Director of the IBD Research Center at the University of California at Los Angeles (UCLA), Professor Harry Pothoulakis, MD, PhD, of Los Angeles, California, USA.

The Asia Pacific region had the most live connections of the second webinar with 1,412; 1,330 of those live connections were from India alone.

The live broadcast of the second webinar had 2,697 live connections from all continents, which nearly doubled the number of live connections of the first webinar! The Asia Pacific region had the most live connections of the second webinar with 1,412; 1,330 of those live connections were from India alone. Pediatricians (30%), general practitioners (22%) and gastroenterologists (13%) were the three most common groups of healthcare professionals to view the second webinar.

To begin the webinar, Prof. Pothoulakis provided an overview of antibi-

...antimicrobial resistance and its consequences represent the most important public health threat worldwide.

otics, which included mention of the global consumption of antibiotics, what constitutes misuse of antibiotics, and why antimicrobial resistance and its consequences represent the most important public health threat worldwide. Prof. Pothoulakis then transitioned to discuss the human microbiome. More specifically he detailed the effects and heavy disruption caused in the human microbiome by antibiotics, and the consequences of antibiotic use being the single most important risk factor for Clostridium difficile Infection (CDI). Prof. Pothoulakis ended the lecture with mention that there is a lack of therapies available to treat CDI and why probiotics, alone or together with antibiotics, represent an attractive alternative therapy to treat the infection.

If you missed the live broadcasts of the first ("Exploring the Hidden World of Human Gut Microbiota") or this second webinar of the series, they are available for viewing on-demand. To view either webinar, please visit https://edge.media-server.com/m/s/ ezz7g8i2/p/pg6bwph9/lan/en. You must register for the webinar series, and once registered will gain access to either on-demand webinar by selecting the title of the respective webinar highlighted in purple. At the end of each webinar, a Certificate of Participation may be downloaded directly from the webinar player.

The third webinar in the series "The Gut-Brain Connection: Can the Gut Control the Brain?" will broadcast live



Microbiota Hard Talks presenter, Prof. Pothoulakis, and Program Director, Prof. Quigley, during the second webinar

on Thursday, 16th November, 2017 at 8:00 AM – 8:45 AM (Houston Time, GMT-6:00) / 2:00 PM – 2:45 PM (GMT). The webinar will be presented by Dr. Luis Maria Bustos-Fernández, MD, of the Institute of Gastroenterology "Dr. Bustos Fernández" in Buenos Aires, Argentina.

About the Webinar Series

'Microbiota Hard Talks – Live From Texas Medical Center' webinar series is supported by an unrestricted medical educational grant from Biocodex. The three part education webinar series aims to provide medical education in the field of the human gut microbiota. This interactive program, developed by Professors Henry Cohen (Montevideo, Uruguay) and Eamonn Quigley (Houston, U.S.A.), both former Presidents of WGO, offers the chance to join experts and like-minded colleagues from around the globe on state-of-the-art microbiota topics. Each webinar features a presentation by a renowned lecturer and will include time dedicated to an interactive question and answer session.

For more information on the "Microbiota Hard Talks" webinar series, please visit the WGO Educational Programs webpage, http://www.worldgastroenterology.org/education-and-training/educational-programs/microbiota-hard-talks.

Summary of the 15th SGA Annual Meeting

The aim was to improve the attendees' practices, which ultimately will enhance the everyday care of patients.



Dr. Majid Almadi, President of the Saudi Gastroenterology Association

The Saudi Gastroenterology Association (SGA) held its 15th annual scientific meeting jointly with the 4th annual meeting of the Saudi Association for the Study of Liver Diseases and Transplantation (SASLT) from 10-12 February, 2017 in Jeddah, Saudi Arabia. More than thirty worldrenowned international and national speakers presented the most updated practices in gastroenterology, endoscopy, and hepatology to more than 800 delegates. The aim was to improve the attendees' practices, which ultimately will enhance the everyday care of patients.

Dr. Majid A. Al Madi, President of the Saudi Gastroenterology Association (SGA), stated that the scientific



Dr. Turki Alameel, Member of the Scientific Committee

and organizing committees did a tremendous job in catering to the different needs of our delegates. Several courses that covered the areas of training and endoscopy were conducted in addition to the main two-day program of the conference. This year two parallel courses were also held. One was a dedicated course on different GI motility disorders, organized for inspiring junior gastroenterologists and GI fellows sponsored by the SGA. The other one was an endoscopy course for nurses, with around 200 nurses attending, giving excellent feedback afterwards.

Dr. Mohamed Alghamdi, President of the Saudi Association for the Study of Liver Disease & Transplantation



Attendees at the conference

(SASLT) stated that the scientific committee placed particular emphasis on new advances in the treatment of Hepatitis C and other hepatology diseases.

The digital oral presentations of the conference's lectures are now available on the SGA website: https://www.saudigastro.com/.

Through such a wonderful and successful annual collaboration between the SGA and SASLT, a meaningful contribution to science was created in our beloved Kingdom of Saudi Arabia







Dr. Hamed Alharbi, Chairman of the Organizing Committee

The digital oral presentations of the conference's lectures are now available on the SGA website: https://www.saudigastro.com/.

The great and positive feedback from attendees drive us to keep motivated and to maintain such high standards. The next meeting will take place in February 2018 in Riyadh.



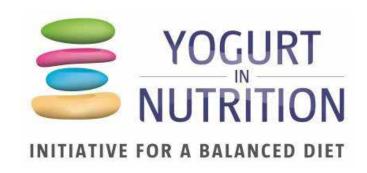
World Gastroenterology Organisation and 'Yogurt In Nutrition Initiative for a balanced diet' Working Together for Supporting You with Your Lactose Intolerance

World Gastroenterology Organisation (WGO) and 'Yogurt In Nutrition Initiative for a balanced diet' (YINI), a joint collaboration between the American Society for Nutrition (ANS) and Danone Institute International (DII), announce the release of a White Book and Infographic in support of their co-developed education campaign. Supported by an unrestricted medical education grant from YINI, the education campaign aims to raise awareness and knowledge of digestive health, lactose intolerance, lactose maldigestion and the effects yogurt may have on lactose intolerants and lactose maldigesters.

Campaign resources previously released include a substantial Question and Answer (Q&A) on Lactose Intolerance and Lactose Maldigestion. To view all campaign resources and/or download them as a PDF, visit http://www.worldgastroenterology.org/wgo-foundation/your-digestive-health/wgo-yini-education-campaign.

A Working Group with representatives from WGO and YINI has been appointed to provide oversight for the education campaign. Working Group representatives are WGO Secretary General and Danone Institute Morocco member, Prof. Naima Amrani (Morocco), YINI Board Member, Dr. Widjaja Lukito (Japan) and Danone Institute Italy member, Prof. Lorenzo Morelli (Italy).

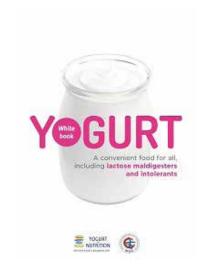
For more information on the WGO-YINI education campaign or to access resources to support Your Digestive Health, visit http://www.worldgastro-enterology.org/wgo-foundation/your-digestive-health.



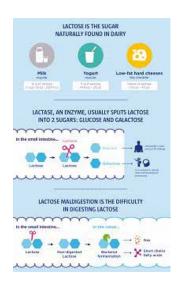
Q&A on Lactose Intolerance



White Book



Infographic





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@WGOF WDHD

https://twitter.com/WGOF_WDHD



http://www.worldgastroenterology.org/about-wgo/media-center/social-media

WGO Guidelines Program: An Interview with Professor Guido Tytgat

e-WGN spoke with Professor G.N.J. Tytgat at his home in Amsterdam. Guido Tytgat is admired by many, being called the Lion of Flanders,



and a great man who pioneered academic and clinical gastroenterology in the Netherlands and Europe. He started the WGO Guidelines program after taking over the leadership from Professor Meinhard Classen in March 2002 when he became the tenth WGO President. In September 2005, he was succeeded by Professor Eamonn Quigley.

Global guidelines with cascades are an absolute necessity – many 'gold standard' or Western guidelines are incompatible and thus useless in many, if not most, clinical settings around the world.



- For the World Gastroenterology
 Organisation, one of the most
 important "raisons d'être" is its re sponsibility in education, teaching
 and training.
- We have gone a long way from the first very simple guidelines to what we have now, but we have not reached the end point yet.
- Global guidelines with cascades are an absolute necessity many 'gold standard' or Western guidelines are incompatible and thus useless in many, if not most, clinical settings around the world. In addition, there is chaos now with too many conflicting recommendations, versions and languages. Compare this with the work of airline pilots: they use the same guidelines and communicate in one language.
- Diseases and infections are globalizing due to traveling and migration of populations, another (quickly) expanding reason why guidelines must be global.
- We need to involve national societies more in getting their best

- regional experts on our guidelines development teams.
- Evidence Based Medicine guidelines are the best way to go but, considering the cost and limits related to EBM, we do the best we can with our current methodology, and I believe the outcome would generally not be different.
- The work of the Rome Foundation is a good model for developing universal global standards, and for getting them accepted.
- There should be a solution for the total chaos in disease grading systems all over the world. WGO could possibly play a role in preventing this enormous loss of resources and help develop a universal disease grading system for instance for Crohn's disease and ulcerative colitis.

It surely was my idea to initiate the guidelines program. In 2002, the sitting council asked me if I was interested to join WGO and I replied yes, but I was so busy with gastroenterology in Amsterdam, which then was and still is the number one institution in Europe, so I only wanted to do it if I could have a certain contribution: I wanted to develop clinical guidelines, I was absolutely convinced of the value for the organiza-

There was an enormous gap between medical care and medical knowledge in developing countries compared with the developed world.



Guido's master class in the unit of prof. K.L. Goh at the University of Malaya, 4-5 March 2003

tion. During my career, I travelled to many developing countries where I was confronted with and frustrated by the fact that local medical workers try to apply 'American' guidelines, guidelines that were totally incompatible with the local situation of the doctors looking for clinical recommendations. There was an enormous gap between medical care and medical knowledge in developing countries compared with the developed world. I am convinced that there is only one global medical truth, one that changes every day, but nevertheless a universal truth no matter where you live and where you catch an illness.

I was frustrated too by all the translations that appeared while I believe there should be one universal language so that we all understand each other, similar to the aviation industry: pilots have one common language and one shared set of instructions to prevent chaos and to promote the highest quality action.

There is a plethora of medical practice guidelines but I believe that eventually we have to get to a global system of universal guidelines, which, of course, would require a layered system with options for situations that do not allow or call for the most expensive or technically advanced solutions. Countries with limited resources cannot be forced to this. But I am convinced there is a common base that should be universal and I have always thought that it fits a global organization, which is an amalgam of what should happen in the world anyway, to take responsibility for this.

For instance, for inflammatory bowel disease there are at least thirty, forty different disease grading systems. Each and every group is developing its own and this has led to a senseless proliferation that has a negative impact on medical care and represents a huge loss of energy. Functional afflictions such as dyspepsia, constipation, and reflux, and even more, Crohn's disease and ulcerative colitis, would greatly benefit from a universal grading approach, and of course this

would be a 'live' system that needs maintenance and updates every two years or so. I am convinced this would be very useful and would benefit patient care and health science all over the world. The work of the Rome Foundation is an example of how to get closer to such a universal approach and to develop a common set of criteria for the management of functional symptoms and disorders in GI, but also for universal criteria for the inclusion of patients in medical trials.

And that is why we started with the first WGO Global Guidelines, which I at first developed on my own in an almost 'embryonic' state, Needlestick Injury for instance, but that now has become a professional program with teams, chairpersons, and updating procedures, and later on with cascaded options for situations where the gold standard is out of reach.

I am involved in several activities focusing on the education of GI specialists and publication of scientific developments. For instance, Gastro Update which is a two-day European mini conference for those who want to stay up to date in gastroenterology. Some fourteen top experts in GI prepare lectures and presentations. In order to be able to do this work, and to justify my overview role, I have to stay abreast of new developments, insights, and opinions, and so I go to the Amsterdam Medical Center every week to read the journals.

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In order to promote representation of data and expertise we now aim for guideline development teams with experts from all over the world. As a



Professor Tytgat at his home in Amsterdam, 7 July 2017

world organization we should ask our national member societies to participate in this in a most structured way by asking their top experts to work on specific guideline sections based on local experience and practice, and evidence and data from regional studies published in their own language. The resulting 'cascaded' recommendations are then to be discussed and accepted at a next WGO meeting and its consistent high-quality level should convince others to choose these global guidelines above regionally developed non-universal alternatives. It would promote gastroenterology and hepatology at large, help practicing clinicians, and make medical care universal, accessible, and deal with inequality.

Does it help to produce global guidelines? All (evidence based) guidelines lack proof that their recommendations when implemented universally improve the quality of health care, and the same is valid for the training centers and other educational initiatives, the required budgets and time to do research on this are simply prohibitive, but it would be very useful to know what the impact of our work is.

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Certain epidemiological differences are rapidly decreasing due to the relocation and mixing of populations everywhere, through international travel, immigration and refugees, and I only expect this to grow. As a consequence, the appearance in academic hospitals of import diseases and rare or non-endemic infections for instance is impressive nowadays. This too calls for global universal guidelines. The management of Strongyloides infection is not depending on where in the world it appears. There are fewer and fewer diseases that only occur in one specific area.

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The updating of guidelines is critical, recommendations that are valid and work for 100 years do not exist, the system should be designed in such a way that a committee keeps up with the developments and decides when an

update is justified. In some areas of gastroenterology and hepatology progress and changes are so fast that it isn't easy to keep our guidelines up-to-date, our Hepatitis C guideline is a good example of how difficult that is. When there is a lot of disagreement, guideline development teams may not reach consensus, but I don't think 100% consensus is an absolute requirement.

I feel that the dissemination of our guidelines can still be much improved and there too, along with internet, is a role for the national societies, we have to keep pushing that they promote our global guidelines. And why wouldn't we, in certain cases, massively distribute industry-sponsored printouts of our guidelines at regional meetings? I also feel that an overview should be presented of our guidelines and cascades in all WGO training centers. A selection of those guidelines that are especially important locally could be highlighted during the courses with an instruction to further promote usage by their colleagues.

Professor Tytgat retired in December 2002 but is still involved in several gastroenterology and scientific activities and organizations despite several personal medical crises in the past few years. Soon, he will turn 80 years old and he "hopes to continue his gastroenterological passions for some time, God willing."

Related links for more information:

World Gastroenterology Organisation http://www.worldgastroenterology.org/about-wgo/history-of-wgo/timeline

Royal Netherlands Academy of Arts and Sciences https://www.knaw.nl/en/members/members/4885

Tytgat Institute https://www.amc.nl/web/Research/Overview/Departments/Tytgat-1/Tytgat-Institute/Department.htm

GastroHep.com https://www.gastrohep.com/profiles/default.asp?person=gtytgat

Gastro Update Europe https://gastro-update-europe.eu/board/

Calendar of Events

WGO-RELATED MEETINGS

World Congress of Gastroenterology (WCOG) at ACG 2017

When: October 13, 2017 - October

18, 2017

Location: Orlando, Florida, United

States

Organizers: American College of Gastroenterology (ACG) and World Gastroenterology Organisation (WGO)

Email: info@worldgastroenterology.

org

Website: http://www.worldcongres-sacg2017.org/

Gastro 2018: WGO-GAT International Conference

When: December 5, 2018 - Decem-

ber 8, 2018

Location: Bangkok, Thailand
Organizers: World Gastroenterology
Organisation, Gastroenterological
Association of Thailand, together with
the Thai Association for the Study of
the Liver, the Thai Neurogastroenterology and Motility Society and the
Thai Association for Gastrointestinal
Endoscopy

Email: secretariat@gastro2018bang-kok.com

Website: www.gastro2018bangkok.

Gastro 2019: World Congress of Gastroenterology Istanbul

When: September 21 - September 24,

Location: Istanbul, Turkey

Organizers: World Gastroenterology Organisation and Turkish Society of

Gastroenterology

CALENDAR OF EVENTS

Curso Avanzado de Patología Gastroduodenal on line

When: July 7, 2017 - December 1,

2017

Country: Argentina

Organizers: CADED (Club Argentino del Estómago y Duodeno) with SAGE (Sociedad Argentina de Gastroenterología)

Email: caded@caded.org.ar
Website: http://www.caded.org.ar/

XXIII United Russian Gastroenterology Week

When: October 9, 2017 - October

11, 2017

Location: Moscow, Russia

Organizer: Russian Gastroenterologi-

cal Association

Email: alexander.trukhmanov@gmail.

<u>com</u>

Website: www.gastro.ru

JDDW 2017 - Japan Digestive Disease Week 2017

When: October 12, 2017 - October

15, 2017

Address: Fukuoka, Japan

Organizer: Organization of JDDW Website: http://www.jddw.jp/ jddw2017/en/index.html

The Liver Meeting® 2017

When: October 20, 2017 - October

24, 2017

Location: Walter E. Washington Con-

vention Center

Address: Washington, DC, United

States

Organizer: AASLD

Website: http://www.aasld.org/events-professional-development/

liver-meeting

25th United European Gastroenterology (UEG Week) 2017

When: October 28, 2017 - Novem-

ber 1, 2017

Location: Fira Gran Via

Address:

Av. Joan Carles I, 64

08908 L'Hospitalet de Llobregat

Barcelona, Spain

Organizer: United European Gastro-

enterology

Email: office@ueg.eu

Website: https://www.ueg.eu/index.

php?id=605

Congreso de las Asociaciones Colombianas del Aparato Digestivo (Colombian Congress of Digestive Diseases)

When: November 16, 2017 - Novem-

ber 19, 2017

Location: Ägora Bogotá Centro de

Convenciones

Address: Carrera 37 No. 24-67

Bogotá, Colombia

Organizer: Asociación Colombiana

De Gastroenterologia Telephone: +57 6168315 Fax: +57 6162376

WGO Member Societies Submit Your Event

Are you a WGO Member Society wanting to share your event with WGO readers? Visit http://www.worldgastroenterology.org/forms/submit-event.php to submit your event for publication in WGO's website conference calendar as well as the quarterly e-WGN calendar of events!



Emirates Gastroenterology and Hepatology Conference 2017

When: November 16, 2017 - Novem-

ber 18, 2017 Location: DICEC Address: Dubai, UAE

Organizer: Emirates Gastroenterology

and Hepatology Society

Email: eghc@meetingmindsexpert.com

Website: eghc2017.com

Semana Nacional de Gastroenterología (National Gastroenterology Week)

When: November 17, 2017 - Novem-

ber 21, 2017

Location: Puebla, Mexico

Organizer: Asociación Mexicana de

Gastroenterología

Email: amg@gastro.org.mx

Website: https://www.gastro.org.mx/semana-nacional-de-gastroenterolo-

gia-2/

17th Iranian Congress of Gastroenterology and Hepatology

When: November 21, 2017 - Novem-

ber 24, 2017

Location: International Conference

Center

Address: Shahid Beheshti University, Daneshjoo BLV, Yaman Ave, Chamran Highway, Tehran, Iran

Organizer: Iranian Association of Gastroenterology and Hepatology Website: http://en.iaghcongress.

org/cong/duty/Detail/ ee2cd60d-7d45-4185-9930-87e21ed76784/?tid=1#Venue

NZSG Annual Scientific Meeting 2017

When: November 22, 2017 - November 24, 2017

Location: SkyCity Convention Centre Address: Auckland, New Zealand Organizers: New Zealand Society of Gastroenterology and NZNO Gastroenterology Nurses Section

website: www.gastro2017.co.nz

ISG Winter Meeting 2017

When: November 23, 2017 - Novem-

ber 24, 2017

Location: Killashee Hotel Address: Naas, County Kildare,

Irelanc

Organizer: Irish Society of Gastroen-

terology

Email: info@isge.ie
Website: www.isge.ie

18th Congress of Gastroenterological Scientific Society of Russia

When: November 23, 2017 - Novem-

ber 24, 2017

Location: Moscow, Russia

Organizer: Gastroenterological Scientific Society of Russia / XII National

Congress of Therapists

Email: mail@interforum.pro

Website: www.congress.rnmot.ru

Korea Digestive Disease Week 2017

When: November 23, 2017 - Novem-

ber 25, 2017

Location: Grand Hilton Seoul Hotel

Address: Seoul, Korea

Organizer: Korean Society of Gastro-

enterology

Email: kddw@conventionpm.com

Website: www.kddw.org

Astana-Gastro 2017: International Scientific and Practical Conference

When: November 23, 2017 - Novem-

ber 24, 2017

Location: Hotel Ramada Plaza Address: Astana, Kazakhstan

Organizers: National Association of Gastroenterology of the Republic of Kazakhstan, Association of Gerontologist of the Republic of Kazakhstan, JSC "Astana Medical University", Medical Center of the Presidents

Affairs

Email: doszhan_88_88@mail.ru

Website: www.amu.kz

16th Annual Congress of the Lebanese Society of Gastroenterology

When: November 24, 2017 - Novem-

ber 25, 2017

Location: Hilton Habtoor Hotel Sin

El Fil

Address: Beirut, Lebanon

Organizer: Lebanese Society of Gas-

troenterology

Website: http://www.lsge.org/

XXVIII Congreso Chileno de Endoscopía Digestiva / XXVI Congreso Chileno de Hepatología

When: November 28, 2017 - Decem-

ber 1, 2017

Location: Hotel y Centro de Conven-

ciones Enjoy

Address: Coquimbo, Chile

Organizer: Sociedad Chilena de Gas-

troenterología

Email: schgastro@schge.cl

6th Congress of the Czech Society of Gastroenterology

When: November 30, 2017 - Decem-

ber 2, 2017

Location: Hotel Clarion

Address: Ostrava, Czech Republic Organizer: Czech Society of Gastro-

enterology

Website: http://www.gastro2017.cz/

20th International Workshop on Therapeutic Endoscopy and the 10th Hepatology and Gastroenterology Post Graduate Course

When: December 7, 2017 - Decem-

ber 10, 2017

Location: Cairo, Egypt

Organizer: Prof. Ibrahim Mostafa Email: info@egyptgastrohep.com Website: www.egyptgastrohep.com

VIII Latvian Gastroenterology Congress with International Participation

When: December 9, 2017 Location: Riga Congress Centre Address: Kr. Valdemara str. 5

Riga, Latvia

Organizers: Latvian Association of Gastroenterologists / Gastroenterol-

ogy Support Society

Email: <u>info@gastroenterologs.lv</u> Website: <u>www.gastro2017.com</u>

ISGCON 2017

When: December 14, 2017 - Decem-

ber 17, 2017

Location: Mayfair Convention Address: Bhubaneswar, Odisha, India Organizer: Indian Society of Gastro-

enterology

Email: <u>isgcon2017@gmail.com</u>
Website: <u>www.isgcon2017.org.in</u>

Annual Meeting

When: January 26, 2018 Location: Center of Pediatrics Address: Tashkent, Uzbekistan Organizer: Society of Pediatrics Gastroenterologists and Dietician of Uzbekistan

Email: okamilova@yahoo.com

16th SGA Annual Meeting & 5th SASLT Meeting

When: February 2, 2018 - February 3, 2018

Location: Al Faisaliah Hotel Address: King Fahd Road, Riyadh,

Saudi Arabia

Organizer: Saudi Gastroenterology

Association

Email: sga@saudigastro.com Website: www.saudigastro.net

Canadian Digestive Diseases Week™ (CDDW™) 2018

When: February 9, 2018 - February

12, 2018

Location: Fairmont Royal York Hotel Address: Toronto, Ontario, Canada Organizer: Canadian Association of

Gastroenterology

Email: cagoffice@cag-acg.org
Website: www.cag-acg.org

XXI Annual Meeting

When: March 13, 2018 - March 16,

2018

Location: Madrid, Spain

Organizer: Asociación Española de

Gastroenterología

Email: aeg@viajesoasis.com Website: www.aegastro.com

Indonesian Digestive Disease Week 2018

When: April 13, 2018 - April 14,

2018

Location: Borobudur Hotel Address: Jakarta, Indonesia Organizer: Indonesian Society of

Gastroenterology

Telephone: +62 21 29614303 Fax: +62 21 23951145

Email: iddw.gastroenterology@gmail.

com

51st Annual Meeting & 28th Postgraduate Course

When: June 14, 2018 - June 16, 2018

Location: Kongresshaus **Address:** Auerspergstrasse 6

Salzburg, Austria

Organizer: Austrian Society of Gastroenterology & Hepatology

SED 2018

When: June 21, 2018 - June 23, 2018 Location: Hotel Sorolla Palace Address: Avinduda de les Corts Valen-

cianes, Valencia, Spain

Organizer: Sociedad Española De Patologia Digestiva (SEPD) Website: http://www.sepd.es

GIHep Singapore 2018

When: July 6, 2018 - July 8, 2018

Country: Singapore

Organizers: Gastroenterological Society of Singapore; Chapter of Gastroenterology, College of Physicians, Singapore Tan Tock Seng Hospital Email: secretariat@gastro.org.sg Website: http://www.gastro.org.sg

JDDW 2018 - Japan Digestive Disease Week 2018

When: November 1, 2018 - Novem-

ber 4, 2018

Location: Kobe, Hyogo, Japan Organizer: Organization of JDDW Website: http://www.jddw.jp/english/

<u>index.html</u>

JDDW 2019 - Japan Digestive Disease Week 2019

When: November 21, 2019 - Novem-

ber 24, 2019

Location: Kobe, Hyogo, Japan Organizer: Organization of JDDW Website: http://www.jddw.jp/english/ index.html