e-WGN

WORLD GASTROENTEROLOGY NEWS

Official e-newsletter of the World Gastroenterology Organisation

www.worldgastroenterology.org

VOL. 16, ISSUE 2 JUNE 2011

In this issue

Enteric Infections Interview

Professor Dr Alejandro Cravioto

Diagnosis of Celiac Disease

Edgardo Smecuol, MD
Julio C. Bai, MD

How to teach Evidence Based Medicine

Alejandro Piscoya, MD

An Editorial from the President of WGO

Richard Kozarek, MD

Executive Director, Digestive Disease Institute
Virginia Mason Medical Center
Seattle, WA USA

"Nothing stops an organization faster than people who believe that the way you worked yesterday is the best way to work tomorrow."

— Jon Madonna

Over the years the World Gastroenterology Organisation (WGO) has established itself as the premier global organization representing gastroenterology and liver disease. Our success is a direct result of the combined effort, commitment and participation of our national society members, affiliated regional associations, and their representatives who have come aboard to lead WGO and its Foundation. On behalf of WGO and the Foundation, I would like to first express our sincere appreciation for the dedication and commitment of our member societies and regional associations, and those individuals actively participating in the leadership, committees and interest sections.

Digestive Diseases Week (DDW) this past May 7-10 in Chicago provided an opportunity not only for us to convene leadership, committee and interest section meetings, but also to celebrate successes, and most importantly, to engage in strategic discussions about the future direction of our organization.

Let us celebrate first. I am honored to congratulate two of our distinguished and learned colleagues. During the General Assembly meeting at DDW, Dr. Henry Cohen, from Uruguay, was elected as the next President, and Dr. Khean-Lee Goh, from Malaysia, as the next Vice President, of WGO. Their tenure in these roles will officially begin later this year in November during Gastro Antalya 2011. We offer our most sincere congratulations to Dr. Cohen and Dr. Goh and wish them the very best as they, with the rest of leadership, help to take our organization forward over the next several years.

The General Assembly also learned at this time about some of the major accomplishments that have taken place since the previous Assembly during the 2009 World Congress of Gastroenterology in

continued on page 3

Contents

Editorials

An Editorial from the President of WGO 01
Richard Kozarek, MD

World Digestive Health Day 2011: Special Scientific Highlight

Enteric Infections Interview 04
Professor Dr Alejandro Cravioto

Scientific News

Diagnosis of Celiac Disease 07
Edgardo Smecuol, MD
Julio C. Bai, MD

How to Teach Evidence Based Medicine 11
Alejandro Piscoya

World Digestive Health Day 2011 News

2011 WDHD: The Campaign So Far 13

WGO & WGOF News

WGO Train the Trainers Workshop Chennai, India 2011 15
Jim Toouli, MBBS, PhD, FRACSI

WGO – Rome Foundation Joint Symposium Summary IBS – The Global Perspective 17
Prof. Eamonn M.M. Quigley
Ami D. Sperber, MD, MSPH
Douglas Drossmann

WGO Global Guidelines

Constructing the NASH – Cascades – Your Invitation to Help 20

Radiation Protection for Gastroenterologists 24

VOL. 16, ISSUE 2

Editor: Henry J. Binder, Greger Lindberg
Managing editor: Leah Kopp
Art Production: Laura Ludwig
Editorial Office: WGO Executive Secretariat, 555 East Wells Street, Suite 1100, Milwaukee, WI 53202 USA
Email: info@worldgastroenterology.org

London. My colleagues on the Executive Committee and I shared news of WGO's

- Improved financial structure;
- Increase in program activity in WGO's 14 Training Centers, provision of highly successful Train the Trainers programs in Lima, Athens and Chennai, the publication of new and updates to existing WGO Guidelines and Cascades;
- Partnership with the Journal of Clinical Gastroenterology to publish the WGO Guidelines and Cascades and organizational news;
- Collaborations with other organizations, including, in 2011, the Rome Foundation for *IBS: The Global Perspective*, April 6-7, in Milwaukee, USA, and the upcoming Turkish Society of Gastroenterology for *Gastro Antalya 2011*, in Turkey, November 16-20; and
- Organization of successful World Digestive Health Day (WDHD) public health, advocacy and awareness campaigns on IBD (2010) and Enteric Infection (2011).

This meeting of the General Assembly, and in fact, all of the meetings that took place during DDW, had the opportunity to hear firsthand about WGO's plans for the future. On May 5, the WGO Executive Committee engaged in a day-long strategic planning retreat. Key strategic issues were covered in detail, the most critical among them being leadership transition and succession, structure and function of the Executive Committee, Governing Council and committees and interest sections, the World Congress and the need for more frequent, theme-focused meetings in interim years, and the future direction of the WGO Foundation in terms of governance and fundraising. The Governing Council, the Foundation Board of Directors, and the various committees and interest sections also had the opportunity to join in the dialogue and provide important feedback about the strategic recommendations made.

From a common belief that the vitality and growth of this organization, in order to meet the demands of a changing world and global economic environment, will increasingly depend on the nimbleness with which we can act as well as react to challenges; and to ensure that the necessary expertise, knowledge, and freshness of new ideas and perspectives are brought to the table, the WGO leadership has made the following strategic recommendations:

- Reduce the size of the Executive Committee to include only the Officers of the Organization;
- Invigorate and redefine the structure of the Governing Council to include broader programmatic representation, while expanding the breadth of its authority;
- Establish 2-year terms for the WGO leadership, with the President serving a single, 2-year term, the Vice Presidential term renewable once, and the Secretary-General and Treasurer terms renewable twice;
- Further define the Nominations process, including terms of 2 years for committee and interest section service, and with regard to eligibility to participate in all aspects of societal governance;
- Refocus Foundation fundraising approach on programmatic versus philanthropic opportunities, while maintaining a broad and inclusive strategy that will consider all potentially viable sources of revenue;
- Continue convening the World Congress every four years, with a major meeting in the 2nd year between Congresses, and seek to have additional collaborations on meetings with regional and national organizations;
- Separate the Guidelines and Publications Committee into two entities; and
- Organize interest groups to be increasingly task-focused moving forward.

Some of these decisions are already in the process of being implemented, while others will require amendment to the WGO Statutes and By-laws before they may be fully activated. As amendments to the Statutes and By-laws cannot be formally approved until the time of the General Assembly during the next World Congress in Shanghai in 2013, this will give WGO time over the next two years to further define and develop each of the recommendations and, most critically, to obtain the feedback of our member national societies and affiliated regional associations before they are finalized.

We are but the stewards of YOUR society, the World Gastroenterology Organisation. Though challenges will always remain ahead of us, I look forward to the opportunity of working with all of you to ensure the future success of our organization. Through our collective efforts, WGO will be stronger than ever and will continue to thrive and grow in service to its members and the field of gastroenterology. Thank you for your ongoing support and contributions.

Enteric Infections Interview

ENTERIC INFECTIONS & ACUTE DIARRHEA

AN INTERVIEW WITH PROFESSOR DR ALEJANDRO CRAVIOTO OF THE ICDDR

PROFESSOR DR ALEJANDRO CRAVIOTO OF THE ICDDR

Executive Director, ICDDR-B and Principal Investigator

Background.
World Digestive Health Day (WDHD) http://www.wgofoundation.org/wdhd-2011.html for 2011 targets Enteric Infections. One of the leading Research Institutions in this area is ICDDR-B, the International Centre for Diarrheal Disease Research, Bangladesh - located in Dhaka.

WGO:
What are the key achievements of ICDDR-B in the field of 'Enteric Infections'?

ICDDR-B:
- Discovery of ORS
- Studies on zinc, which started with basic studies, followed by efficacy trails in the management of acute and persistent diarrhoea, and finally demonstrating its usefulness in modest reduction in diarrhoea duration but more importantly future episodes of diarrhoea that have been instrumental in WHO/Unicef joint recommendation on routine use of zinc in the management of acute diarrhoea, regardless of aetiology, in children under-five years of age.
- Field testing of the protective efficacy of injectable cholera vaccine. Our study proved the vaccine was ineffective in providing protection over a reasonable period of time. As a result, WHO withdrew its recommendation on routine cholera vaccination saving millions of dollars globally each year
- Simplification of oral rehydration solutions (sucrose, molasses, and cereal) based to: (i) enable initiation of diarrhoea management at home, and (ii) address the distribution problems in developing countries lacking facilities to produce the required number of ORS sachets and their wider distribution covering every corner of the country
- Search for super-ORS through testing of different formulations of ORS to improve efficacy
- Major site for testing of WHO-sponsored, multicentre study to test efficacy and safety of "hypo-osmolar" ORS that resulted in recommendation of the new formulation by WHO and Unicef Interaction between V. cholerae with aquatic environment (survival in phytoplanktons)
- Defining the role of phages in V. cholerae-Developing Rapid Diagnostic Test (RDT) for cholera due to V. cholerae O1 and O139
- Identification of emerging newer enteric pathogens or new serotypes of existing ones
- Monitoring of the aetiology and antimicrobial susceptibility of important enteric bacterial pathogens, and dissemination of findings that helped establish rational treatment to diarrhoeal patients in Bangladesh.
- Field testing of the oral, whole cell, killed cholera vaccine in Matlab which showed a cumulative protective efficacy of 45% over 3 years
- Demonstration of reduced efficacy of oral enteric vaccines, and improving host immune response to cholera vaccine by zinc
- Diarrhoeal disease outbreak response globally

- Development of clinical algorithm for management of persistent diarrhoea, suitable for developing countries
- Testing newer pharmaceuticals agents for management of cholera and shigellosis, and to defining newer dosing schedule to optimize cost-effectiveness, improve compliance, and delaying emergence of antimicrobial resistance among the pathogens
- Establishment of Protocols for management of severely malnourished children with diarrhoea

WGO:
What are key obstacles in achieving your mission?

ICDDR-B:
- Reduction in the number of research grants in addressing issues related to diarrheal diseases
- Competing priorities in global research funding, such as for promotion of routine zinc therapy for childhood diarrhea
- To convince international sponsors that diarrhea remains a major public health problem and still the second leading cause of childhood deaths
- Defining and establishing effective and sustainable means to reduce incidence (in addition to zinc therapy) of diarrheal diseases
- Finding effective, culturally acceptable, and sustainable means to promote Exclusive Breastfeeding (EBF) (to reduce incidence)
- In view of the arsenic contamination of sub-soil water, finding a solution to provide safe water for preventing enteric infections

WGO:
Dr Tikki Pang – currently Director of Research (WHO) once wrote in the Lancet (2006, vol 367, January 28):

"Applying what we know already will have a bigger impact on health and disease than any drug or technology likely to be introduced in the next decade "

What could this mean for Enteric Infections?

ICDDR-B :
- This equally applies to enteric infections – there are so many known interventions, which have not been fully implemented/ optimized globally. For example, the role of using safe drinking water, improved sanitation and personal hygiene, particularly hand washing, and exclusive breast feeding during the first six months and its continuation as long as possible are well-known. However, progress has been very slow. In the management of diarrheal disease, the role of ORS and zinc are well known, but they are not promoted adequately in different countries. Currently, effective vaccines are available for prevention of rotavirus infections and cholera, but they can't be incorporated in the public health sector in developing countries due to their prohibitive costs. In many developing countries, Expanded Programme on Immunization (EPI) success is low. Countries with effective EPI programmes, particularly high rates of measles vaccination, are believed to have benefitted, at least from reduced incidence of shigellosis. The same applies for vitamin A supplementation programmes for young children.

  However, there still is the need for new research, which includes development of low cost rapid diagnostic tests and effective vaccines that are affordable and sustainable for low income countries. There is a great need for health system research to define ways to improve uptake of solutions/interventions that are already known, including efficient communications to change behavior. Additionally, there is a great need to define, test, and identify locally made, culturally appropriate, and affordable complementary food for low-income countries.

WGO:
Even in a situation with minimum resources – the WGO Guideline on Acute Diarrhea suggest you can still make oral 'home-made' ORS with salt, glucose and orange juice dissolved in water. Do you think this is useful advice? Can you think of an even more basic and still useful thing to do in this regard?

ICDDR-B:
- Indeed, use of home made solution can be life-saving. An important reason for ICDDR-B to venture into finding home-based solutions has been to overcome the anticipated production and distribution difficulties of pharmaceutical ORS. With improved transportation and distribution systems, ORS is currently available even in remote areas in Bangladesh; however, the situation is different in most African countries where home made solutions could have a great impact. In addition to establishment of a National Diarrheal Disease Control Programme, as recommended by WHO, there had also been tremendous inputs in Bangladesh from large health NGOs in promoting home based solutions, as well as Social Marketing approaches in wide delivery of pre-packed products, which have not replicated in most other countries. It requires decades of sustained effort to reach where Bangladesh is today. Oranges may not be readily available and/ or affordable to many developing countries (e.g. Bangladesh), and more importantly not essential in the preparation of effective, home-based fluids - simple sugar-salt

solution, without orange juice, is as effective and needs to be advocated and promoted.

WGO:
Finally, what message would you have for our 50,000 + plus readers and how would you like us to promote your work in this article?

ICDDR-B:
- Diarrhea is a potentially preventable and treatable disease. Simple interventions like home-based fluids and ORS, and zinc therapy may produce great impact. There is a need for maximizing the use of existing knowledge and technology. Finally, there is the need for further research on prevention and treatment, particularly scaling up of already available interventions.

WGO:
Thank you very much Dr Cravioto.

Diagnosis of Celiac Disease

Edgardo Smecuol

Small Bowel Section; Clinical Gastroenterology Unit; Department of Medicine; Dr. C. Bonorino Udaondo Gastroenterology Hospital. Buenos Aires, Argentina

Julio C. Bai

Head of the Department of Medicine; Dr. C. Bonorino Udaondo Gastroenterology Hospital. Buenos Aires, Argentina
Professor; Gastroenterology Chair; Universidad del Salvador, Buenos Aires, Argentina.

Celiac disease (CD) is a life-long chronic systemic disorder characterized by an immunologically mediated enteropathy induced by the dietary gluten, which improves with the exclusion of the toxic protein from diet. The disorder affects genetically susceptible individuals carrying the human leukocyte antigen (HLA) class II DQ2 and/or DQ8.

Some decades ago, CD had been considered a rare disorder basically due to the fact that diagnosis was based primarily on the presence of gastrointestinal (GI) symptoms, such as diarrhea, accompanied by signs of malabsorption and weight loss. However, recent epidemiological studies have revealed that CD is much more common than previously thought. Thus, the prevalence of this condition is shown to be close to 1% in Europe, the Americas, North Africa, the Middle East, and India [2,3]. Furthermore, recent research has also found evidence that the increasing rates of CD patients detected worldwide may reflect a true rise in disease prevalence [4].

In the clinical context, the extraordinary expansion in the number of patients diagnosed of CD correlates with a notably wide variety of clinical manifestations of the disorder ranging from severe GI symptoms and malnutrition (very rare today) to silent cases that are diagnosed incidentally or in relatives of already-diagnosed patients. Indeed, the majority of cases currently diagnosed are characterized by extra-intestinal manifestations, including dermatitis herpetiformis, chronic anemia, gastroesophageal reflux symptoms, hypertransaminasemia, osteopenia or osteoporosis, puberal delay, aphthous stomatitis, short stature, cerebellar ataxia, infertility, etc. [1]. However, the prevalence of different clinical forms is variable according to the geographic area considered and the degree of expertise of the medical community. This diversity of symptoms represents a challenge to the professionals not familiar with CD. Many patients are diagnosed as a result of screening in population at risk or by incidental endoscopic findings of characteristic duodenal mucosal features in patients undergoing upper endoscopy for reasons other than suspected CD [5]. It is interesting to note that more that 50% of the newly diagnosed cases from screening relatives of CD patients are completely silent and, otherwise, would not have required consultation for medical attention [3]. In addition, compared with two decades ago, a greater proportion of patients are being diagnosed later in the adulthood [5].

IMPORTANCE OF DETECTION

Symptomatic CD patients are affected in the daily life, while introduction of a gluten-free diet (GFD) most often induces significant improvement of symptoms, abnormal biochemical measures, and impaired quality of life. Concern remains about the long-term consequences of CD and whether maintaining a life-long GFD is necessary for all CD patients. However, understanding of the outcomes of CD is complicated by a number of factors:

- The broad clinical spectrum of the disease determines that a large number of subjects have minimal or no symptoms;
- The bulk of current scientific knowledge has been derived from a minority of patients (mostly symptomatic), but the natural history of undiagnosed CD is unclear; and
- The influence of the degree of adherence to the GFD which might contribute to the prevention or treatment of complications.

Notably, the ratio of patients with undetected CD to those with diagnosed disease is approximately 8:1, which seems to be higher in some countries [1,3]. Many published studies exploring the prevalence of CD-associated adverse events or complications have been limited by the sample population of patients, choice of control groups, ascertainment bias, etc.

CD has been associated with increased mortality and malignancy compared with the general population (all–cause mortality: 30% to 40% increment; cancer mortality: 60% to 80% increment) [6]. The risk of malignancies in CD patients, in particular lymphomas, has been estimated at 1.3 times higher than that of the general population, which is lower than data reported in the 1970s and 1980s. Recent studies have raised concerns that the risk of malignancy in people with undetected CD may be high. Interestingly, Ludvigson et al. [7] found that patients with mild enteropathy not defined as CD have increased mortality compared with the control population. Finally, the effect of the GFD on preventing of CD-related mortality or malignancies remains undefined.

Non-malignant complications of CD include a modest increase in fracture risk as well as neurological and/or psychiatric conditions. Reproductive problems are present in a minority of cases and may have been overestimated. Contrary to the uncertainties of malignancy risks, the available literature has convincingly demonstrated a positive effect of early diagnosis of CD and prompt GFD treatment on the prevention and improvement of these nonmalignant complications. Therefore, early detection for CD and long-term strict adherent to GFD treatment have been strongly recommended by experts [8,9].

DIAGNOSING CELIAC DISEASE: PAST AND PRESENT.

Until the 1950s, the diagnosis of CD was based on clinical observations focused on malabsorptive features. The peroral intestinal biopsies, introduced in 1956, marked a significant change in CD diagnosis. Since then, histological assessment of intestinal mucosa, with evidence of characteristic gluten-dependent mucosal damage, is considered the gold standard for CD diagnosis.

In last two decades, upper GI endoscopy has gained prominence in mucosal sample collection, which is less invasive than peroral biopsy [10]. Today, endoscopy is widely used for duodenal sampling. In addition, the endoscopic procedure allows the incidental observation of typical duodenoscopic features that are highly predictive of the disease. However, endoscopic markers alone are not very sensitive (<50% in low-risk populations) for CD diagnosis; while apparently normal duodenal mucosa cannot exclude CD [10].

Histological damage is considered characteristic but not pathognomonic of CD, as similar lesions are seen in several other disorders. According to criteria developed by the European Society of Pediatric Gastroenterology and Nutrition, gluten-dependence of the intestinal mucosal damage should be established by histological improvement in response a GFD and recurrence of enteropathy after reintroduction of the offensive protein (the "Interlaken criteria"). This diagnostic algorithm requiring three consecutive biopsies was challenged by experts and rejected by patients and physicians. Thus, it was suggested that the first biopsy alone is highly predictive of CD (>95%). Meanwhile, the advent of CD-related serology tests, introduced more the 25 years ago, contributed to the revision of CD diagnostic criteria (1,5). Increasingly sensitive and specific serologic tests provide more options for diagnosis of the disorder. Currently, serological tests are considered important surrogate markers for gluten-dependent damage [9,10].

In current practice, the diagnosis of CD hinges on the diagnostic intestinal biopsy and the concomitant presence of a positive CD-specific serology. A second (post-treatment) biopsy should be reserved for patients in whom the first biopsy and serologic test were inconclusive (e.g. seronegative enteropathy) or for patients on a strict GFD who have less than expected outcomes. Gluten challenge should be reserved for patients on a GFD without an unequivocal diagnosis. Genetic typing (HLA DQ2 and DQ8) can be useful tools for excluding CD in those whose tests remain inconclusive [10].

CHARACTERISTIC ENTEROPATHY

As stated above, the diagnosis of CD requires histological examination of small bowel biopsies. The disease has an almost invariable gradient of lesions, more pronounced in the proximal intestine (duodenum) while minor or not apparent distally. Patients with severe CD may have damage in the ileum. Therefore, duodenal sampling is considered sufficient to establish a diagnosis of CD; only exceptional cases require more distal biopsies. It is important to note that duodenal biopsies have some limitations (i.e., as a result of size and orientation of biopsy that may affect the diagnostic accuracy. Moreover, the patchy nature of mucosal damage in CD should be considered. Biopsy samples taken from proximal duodenum (above Vater´s papilla) may have artifacts (e.g., stretching of villi) produced by submucosal Brunner glands, which may be falsely interpreted as flat mucosa. However, a recent prospective study [11] estimated that 13% of new CD patients are diagnosed based only on biopsies obtained in the duodenal bulb. Evidence shows that larger-sized and more biopsy samples (≥4) produce more accurate diagnosis as they minimize the bias of the patchy distribution of lesions.

Certain techniques during the endoscopic procedure can help physicians obtain better samples for accurate evaluation. For example, duodenoscopy using videoendoscopes with or without enhancing procedures (e.g. water immersion, vital stain-

ing, magnification, etc.) is helpful for detecting endoscopic markers and orientating sampling.

Under light microscopy, the most characteristic histological findings in patients consuming a gluten-containing diet are:

- blunted or atrophic villi,
- crypt hyperplasia,
- mononuclear cell infiltration of the lamina propria,
- epithelial changes, including structural abnormalities in epithelial cells and intraepithelial lymphocyte infiltration.

Through a series of well-designed studies, M. Marsh [12] interpreted the spectrum of mucosal lesions as representing the progression of damage induced by gluten and categorized the CD histological modifications as ranging from normal mucosa (an initial event defined as Marsh´s type 0) (e.g. 30% of cases with well-established dermatitis herpetiformis) to complete flat villi. The Marsh classification has been widely used in clinical practice. Abnormal villi structure is considered the destructive type of lesion (Marsh type III), which is highly predictive of CD independent of other subrogate markers of gluten dependency. In 1999, Rostami et al. [13] created subcategories within the Marsh type III: A (partial villous atrophy), B (subtotal villous atrophy), and C (total villous atrophy). Damage of different intensity in the same sample or in different samples obtained at the same time is often observed.

In the middle of the spectrum of CD mucosal damage is the presence of subtle abnormalities, defined by Marsh as type I, normal villi with increased intraepithelial lymphocytes, or type II, hyperplastic damage with increased intraepithelial lymphocyte density and crypt hyperplasia. Because these subtle abnormalities can be detected in many other disorders as well (for example, 10% of cases with only increased IEL density are finally diagnosed of CD) [12], patients with minimal enteropathy need additional examination.

Conventional diagnosis of CD requires an intestinal damage type III A or worse [14]. There is a general agreement among experts that, as other surrogate markers of gluten-dependence become available, new standards will be developed for diagnosing this disorder.

CELIAC DISEASE-SPECIFIC SEROLOGY

CD-specific serological tests have gained importance over time and have been used for more than 20 years as tools for screening suspected CD patients who require an intestinal biopsy. Immunoglobulin A (IgA) and IgG antigliadin antibodies (AGA) addressing crude gliadin as a substrate were the first tests introduced. Later studies demonstrated disappointing sensitivity and specificity of AGA, making them unsuitable for screening CD [15-17]. Subsequently, the detection of IgA antibodies against the endomysium (EmA) of monkey esophagus was shown to be highly sensitive and specific. Thus, the immunofluorecence assay became an essential tool in the serological algorithm for CD screening. In addition, the test assesses gluten dependence of the characteristic histological findings. Further research identified the ubiquitous enzyme tissue transglutaminase as the autoantigen reacting with EmA, leading to the development of the tissue transglutaminase antibody (tTG) test, which uses the ELISA platform [15]. As the performance of new tests was demonstrated, the AGA serology test has become obsolete (9).

More recently, a new generation of antigliadin antibody assays using synthetic deamidated gliadin peptides as substrates has shown equivalent performance to the conventional tTG test [16]. These antibodies are IgA and/or IgG based. Specifically, IgG-based tests are useful for detecting CD in selective IgA-deficient cases. In addition, combining different isotypes of antibodies in a single assay can add sensitivity to screening algorithms while a second assay substantially increases diagnostic performance [17].

Thus, a number of serological markers are now available for use for two purposes: for selecting patients appropriate for biopsies, or to confirm a diagnosis of CD. Nevertheless, the accuracy and reliability of serological tests have been established in studies conducted in research settings under experimental conditions and may not reflect the accuracy in clinical practice.

Because of the invasiveness and complexity of obtaining histological diagnosis of CD in clinical practice, where misdiagnosis (over- and under-interpretation of enteropathy) is relatively common, the usefulness of serology tests as the sole diagnostic method for CD has also been explored. Based on the high positive predictive values of serological tests, some authors have suggested that intestinal biopsy is no longer mandatory for diagnosing CD in at least some patients [17]. Various approaches to finding a blood test-based CD diagnosis are being investigated. If confirmed, the diagnosis of CD will become more convenient for patients and more practical and accurate in general practice.

WHO SHOULD BE TESTED FOR CD?

Testing for CD should be considered in a variety of clinical situations for the following types of at-risk populations: 1) persons with gastrointestinal symptoms including chronic diarrhea, malabsorption, weight loss, and abdominal distension; 2) individuals without other explanation for signs and symptoms including persistently elevated serum aminotransferases, short stature, delayed puberty, iron-

deficiency anemia, recurrent misconception, osteoporosis at a young age, infertility; 3) conditions associated with a high risk for CD, including type 1 diabetes mellitus, autoimmune disorders, endocrinopathies, first- and second-degree relatives of individuals with CD (probably the most relevant at risk population), patients with Turner, Down, or Williams syndromes. Other conditions for which CD testing may also be considered include irritable bowel syndrome, persistent aphthous stomatitis, peripheral neuropathy, cerebellar ataxia and other neurological manifestations, and dental enamel hypoplasia [1,5,9,10].

CONCLUSION

The diagnosis of CD is currently a challenge for gastroenterologists and other physicians. Increasing awareness and recognition of the clinical variability of the disorder in the medical community are essential for improving the accuracy of CD diagnosis. Moreover, clinicians should consider comorbid conditions associated with a higher risk of CD. Use of appropriate serologic tests, followed by intestinal biopsy, has proved to be a cost-effective algorithm for diagnosing CD. It is essential that a patient's clinical, serological, and histological changes before and after the administration of the GFD be carefully evaluated if the patient's histology and serology results are inconsistent or inconclusive.

Currently, duodenoscopy is the preferred procedure for obtaining duodenal biopsies. Physicians must be aware of the patchy distribution of the mucosal lesions and choose biopsies in areas with more severe damage. Histological assessment of biopsies carries potential risks of misdiagnosis, especially in the community medical setting, which may be related to the poor quality of samples and/or assessment by general pathologists. CD-specific serology has a well-established place in the diagnostic armamentarium, but its role as a single tool has not yet been clearly defined. Finally, genotyping for HLA DQ2 and DQ8 may be valuable in equivocal cases when a negative result excludes CD.

REFERENCES

1- Green PH, Cellier C. Celiac disease.N Engl J Med 2007; 357: 1731-43

2- Catassi C. The world map of celiac disease. Acta Gastroenterol Latinoam 2005; 35: 37-55

3- Fassano A, Catassi C. The global village of celiac disease and its evolution over time. E-WGN 2011; 15: 5-8

4- Lohi S, Mustalahati K, Kaukinen D, et al. Increasing prevalence of celiac disease over time. Aliment Pharmacol Ther 2007; 26: 1217-25

5- Di Sabatino A, Corazza GR. Coeliac disease. Lancet 2009: 373: 1480-93

6- Grainge MJ, West J, Card TR, et al. Causes of Death in People With Celiac Disease Spanning the Pre- and Post-Serology Era: A Population-Based Cohort Study From Derby, UK. Am J Gastroenterol. 2011 [Epub ahead of print].

7- Ludvigsson JF, Montgomery SM, Ekbom A, et al. Small-intestinal histopathology and mortality risk in celiac disease. JAMA. 2009; 302: 1171-8.

8- Roston A, Murray JA, Kagnoff MF. American Gastroenterological Association Institute Technical Review on the diagnosis and management of Celiac Disease. Gastroenterology 2006; 131: 1981-2002.

9- Bai JC, Zeballos E, Fried M, Corazza GR, Schuppan D, Farthing MJG, et al. Celiac Disease. WGO-OMGE Practice Guidelines. World Gastroenterology News 2005;10: S1-S8

10- Dickey W. Endoscopic marker for celiac disease. Nat Clin Pract Gastroenterol Hepatol 2006; 3: 546-51.

11- Gonzalez S, Gupta A, Cheng J, et al. Prospective study of the role of duodenal bulb biopsies in the diagnosis of celiac disease. Gastrointest Endosc. 2010; 72: 758-65.

12- Marsh MN. Gluten, major histocompatibility complex, and the small intestine. A molecular and immunobiologic approach to the spectrum of gluten sensitivity (´celiac sprue´). Gastroenterology 1992; 102: 330-54.

13- Rostami K, Kerckhaert J, Tiemessen R, et al. Sensitivity of antiendomysium and antigliadin antibodies in untreated celiac disease disappointing in clinical practice. Am J Gastroenterol 1999; 94: 888-94.

14- Working Group of the United European Gastroenterology Group in Amsterdam. When is a coeliac a coeliac? Eur J Gastroenterol 2001; 13: 1123-8

15- Rostom A, Dubé C, Cranney A, Saloojee N, Sy R, Garritty C, et al. The diagnostic accuracy of serologic tests for celiac disease: a systemic review. Gastroenterology 2005; 128: S38-S46

16- Sugai E, Vázquez H, Nachman F, et al. Accuracy of testing for antibodies to synthetic gliadin-related peptides in celiac disease. Clin Gastroenterol Hepatol. 2006; 4: 1112-7.

17- Sugai E, Moreno ML, Hwang HJ, et al. Celiac disease serology in patients with different pretest probabilities: is biopsy avoidable? World J Gastroenterol. 2010; 16: 3144-52.

How to teach Evidence Based Medicine

Alejandro Piscoya

Professor of Medicine - Universidad Peruana de Ciencias Aplicadas (UPC)
Gastroenterologist – Hospital Nacional Cayetano Heredia, Lima - Perú
Member of the Editorial Board – Revista de Gastroenterología del Perú

Evidence Based Medicine (EBM) provides a set of tools that can be quite important as one gets to work and study at the same time. When studying for a specialty one needs to read so much that an approach to improve reading and understanding of papers becomes crucial. EBM can help you to find, for example systematic reviews, i.e. short articles other people have written to put together the evidence from many original articles and this can save a substantial amount of time.

EBM is important also for the WGO and from time to time EBM is taught in their training centers like the one in Bolivia (La Paz Training Center) (1) where some formal training in EBM was provided in their short course. I remember there were two doctors from Uruguay that taught us the way to read a paper and realize whether it will be useful for us. Last year they gave us the opportunity to participate in another EBM workshop. The way EBM is taught is somewhat different from other learning activities. Here we did not sit in our chairs listening to a lecturer. Instead, we had to read the paper in advance and work in small groups solving questions about the paper and later sharing our answers with everybody else and discussing the results. The Center of Evidence Based Medicine of the University of Oxford has a "How to teach EBM" Workshop (2) where EBM is taught nearly in the same way as in La Paz.

One of the most interesting courses of the WGO is the "Train the Trainers" (TTT) (3). TTT is an outstanding experience both as a student and as a faculty member. It is organized in small work groups in mornings and afternoons with very few lectures but many sessions where participants can discuss and obtain a better understanding of what was just taught. One of the topics at TTT is EBM, which is taught in small groups with critical appraisal of several papers.

Right after my TTT course in Santiago 2009, I found a group in my former university that was teaching EBM. I joined them and we have worked together since then. This was an international collaboration that by the time I started working with them was funded by ICOHRTA(4), whose focus was HIV and Tuberculosis but not gastroenterology. This was a challenge but the way EBM is taught can be used in any specialty so I managed to keep learning while working with them as a facilitator. Last year, after our "hands-on training", the Peruvian faculty took over most of the lectures and workshops of the course. By then, the team was really interested in the assessment of the whole course, but we found there was not much information about the impact of our work. After gathering information from a questionnaire that had been answered by the participants during the last 5 years, we realized how difficult it was to use these questionnaires. The most interesting conclusion of our research was that most of the tools were written in English. Since English is not our mother tongue, it was difficult for our students to understand some aspects of EBM and it will probably continue to be difficult without a proper translation of the course material into Spanish. Another important issue was the number of days of the workshops and the time that the students had available. Most of the students had clinical work to do and prioritized their jobs and could not stay at the workshop for an entire day. Finally, we need better instruments for assessing our results (5).

Some of these difficulties were shared during the last TTT workshops that were organized by the WGO; first in Santiago de Chile in 2009, a group of the non-English speaking participants had difficulty understanding the lectures and more trouble during critical appraisal and how to teach endoscopy workshops. Last year in Lima, Peru, the faculty faced the same problems again and part of the workshops therefore were changed in order to use mother tongue (Spanish) of most of the participants who were divided between a Spanish-speaking and an English-speaking groups. This was quickly addressed by the WGO and this year we will have our first WGO sponsored TTT in Spanish that will be held in August in Porto Alegre, Brazil (6).

Funding is always an issue and that is why the ICOHRTA has been of such great help in our Peruvian workshop. The WGO recognized this from the beginning and fortunately WGO manages to fund most if not all costs of their workshops, an effort that is appreciated worldwide.

The issue of having an instrument to assess the results of the workshop has recently been addressed by a Spanish group (7). They have validated a Spanish translation of the Fresno test, and we may try to use it in our next workshops. We expect some difficulty since Latin American people differ from Europeans, and we may need to adapt part of the questions but the Fresno test is still a validated instrument that should be of great help. I believe that we can also use this questionnaire as the basis to create our own TTT assessment questionnaire.

This is our call for action; WGO should evaluate the short and long-term benefits of their current training courses and especially the TTT courses, both in the English version and in the new Spanish version. There is an instrument available for EBM assessment; it can be used as a model in order to develop methods to assess our courses individually and as a whole.

REFERENCES

(1) La Paz WGO Training Center. Available at: http://www.lapaztrainingcenter.org/.

(2) Oxford University. Center of Evidence Based Medicine. Available at: http://www.cebm.net/.

(3) World Gastroenterology Organization (WGO). Train the Trainers. Available at: http://www.worldgastroenterology.org/train-the-trainers.html.

(4) International Clinical, Operational, and Health Services Research and Training Award (ICOHRTA). Available at: http://www.fic.nih.gov/programs/training_grants/icohrta/index.htm.

(5) Tomatis C, Taramona C, Rizo-Patrón E, Hernández F, Rodríguez P, Piscoya A, Gonzales E, Gotuzzo E, Heudebert G, Centor RM, Estrada CA. *Evidence-based medicine training in a resource-poor country, the importance of leveraging personal and institutional relationships.* J Eval Clin Pract 2011 (first online Jan 30, 2011, http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2753.2011.01635.x/full).

(6) WGO. Spanish TTT. Available at: http://www.worldgastroenterology.org/train-the-trainers-workshops-2011.html.

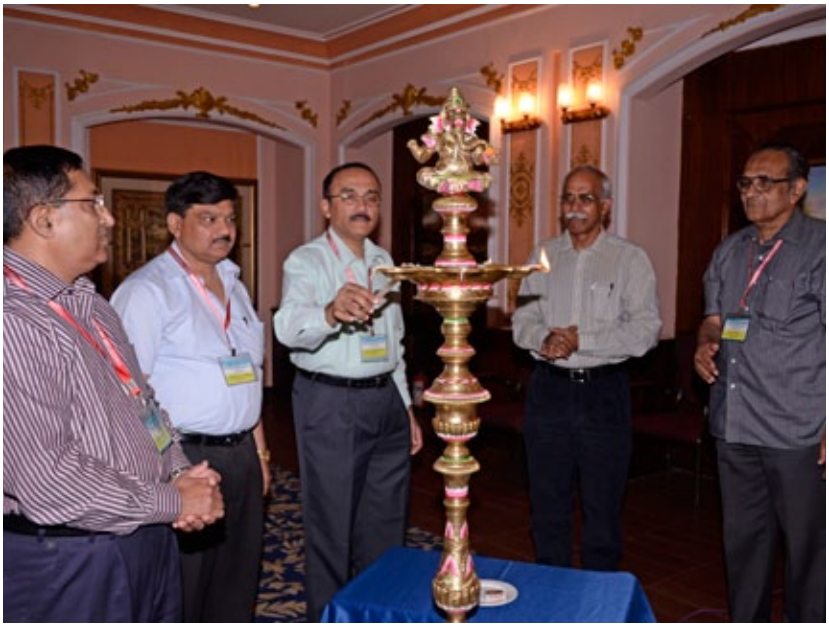
(7) Argimon-Pallàs J, Flores-Mateo G, Jiménez-Villa J, Pujol-Ribera E. Psychometric properties of a test in evidence based practice: the Spanish version of the Fresno test. BMC Medical Education 2010;10(1):45.

2011 WDHD: The Campaign So Far

View the full 2011 report later this year

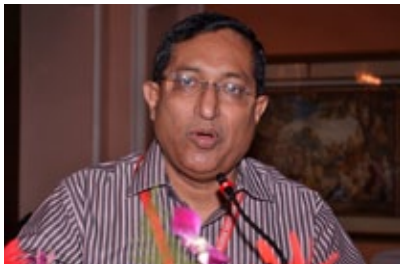
INDIA

On May 29, the Indian Society of Gastroenterology held their Midterm Conference and at the same time, celebrated WDHD 2011. Dr. S.P. Singh began with the WDHD introduction, followed by the Inauguration and WDHD 2011 Keynote Address by Prof. V.I. Mathan. Finally, prior to the day of sessions, there were addresses by Prof. B.S. Ramakrishna, Prof. S.P. Misra, and Prof. A Chacko.



Professor BS Ramakrishna lighting the inaugural lamp at WDHD 2011

Participants enjoy sessions in celebration of World Digestive Health Day in India



Prof Ashok Chacko, President of ISG, addressing the WDHD 2011 Meeting

PAKISTAN

To observe World Digestive Health Day, a symposium was organized by the Department of Hepatogastroenterology, Sindh Institute of Urology and Transplantation (SIUT), Karachi, Pakistan. The objective of this symposium was to increase the awareness of health care professionals on the high prevalence of enteric infections in Pakistan. Speaking on this occasion, Prof. Adeebul Hassan Rizvi, Director SIUT, stressed the importance of cleanliness and hygienic measures to be observed in the community to prevent spread of enteric infections. Importance of clean food, clean water and clean environment cannot be over emphasized, he added. Dr. Sabhita Shabir introduced the activities of World Gastroenterology Organisation with its aims and objectives of celebrating this event.

The symposium held at the Sindh Institute of Urology and Transplantation in Karachi, Pakistan

SPAIN

Spain celebrated Día Mundial de la Salud Digestiva with an event addressed to the general population with special interest in the prevention of gastrointestinal infections. There was a very high press impact with many articles written on various topics. Click here to view one!

CHILE

"Síndrome de intestino irritable" De la fisiopatología al tratamiento was celebrated this year in Chile with a successful tent which existed for the public educational talks, beside a scientific clinical conference. To download the full presentation, click here: http://www.perugastro.com/sesiones2011/marzo/intestino-irritable/intestino_irritable.pdf ■

Chile celebrates WDHD 2011 with various educational events

WGO Train the Trainers Workshop Chennai, India 2011

Jim Toouli, MBBS, PhD, FRACS

Flinders Medical Centre
Dept. of General and Digestive Surgery
Bedford Park, Adelaide
Australia
jim.toouli@flinders.edu.au

WGO 2011 Train the Trainers Workshop
The photo was taken at the Residency Towers Hotel

In collaboration with the Indian Society of Gastroenterology (ISG), WGO is pleased to have successfully completed the 14th Train the Trainers Workshop, which took place from April 11-14, 2011 in Chennai, India. This TTT workshop represented a special significance for those involved in the planning process primarily because just over two years ago the December 2008 Train the Trainers workshop had been cancelled so abruptly due to the terrorist attacks in Mumbai and the bombing threats made to airports in India, including the Chennai Airport which was the port of transit for participants and faculty.

What also made this TTT workshop so exceptional is that it marked the 10 year anniversary of Train the Trainers. Developed and organized by the WGO Education and Training Committee in 2001, under the guidance of Professor James Toouli, this unique workshop has proven to be a highly successful method of disseminating teaching skills to those gastroenterologists who hold training positions in their own countries. The delegates are equipped with skills which they can then implement in their countries. Not only has this workshop been enthusiastically received by all national member societies around the world, it also provides an excellent forum for the exchange of ideas and the establishment of contacts between various countries, in an environment which is conducive to learning and interaction. For the long-term, it is planned to export aspects of the workshop to regions around the world. Ideally, delegates who have attended the meeting should work closely with the TTT organizers to deliver components of the program in their own country, with the active collaboration of their national gastroenterological society.

This Train the Trainers workshop consisted of fifty participants and ten faculty members, representing nineteen countries from around the world, all sharing the same vision educationally, which is the global improvement of quality patient care.

On behalf of WGO, our most sincere appreciation goes to the ISG and its host coordinator, Dr. KR Palaniswamy, for being such a gracious and generous host to all those in attendance. The TTT workshop was well received and truly a fruitful experience for all involved. The team-building event and city tour allowed for many to witness the splendor that makes Chennai such an extraordinary city. WGO also wishes to thank all of the local facilitators and international faculty for their dedication and contribution throughout the workshop, which is what makes TTTs an enduring success for WGO.

Following in the example of Pendleton's Rules, participants were encouraged to provide feedback based on "What went well?" and "What you could do better", which gives specific suggestions for improvement as opposed to instantly identifying "What went wrong?", which our minds are

Above: Dr. Palaniswamy and Dr. Toouli after the Teambuilding Event

typically conditioned to do.

Based on this method of feedback, participants wrote the following:

Overall, a well balanced program in which topics are relevant to training. The fact that it was attended by people from various countries is important and gives an extra dimension. The ideas of breakout sessions are great, what was shown for example is that introducing examples/cases in the lectures will help to remember the theoretical phrases. –Participant, TTT Chennai

Majority of modules were good, well presented introspective, intersection and relevant. They all enhanced our knowledge of understanding on various aspects. It provided a very efficient means to interact with our group members who have different but brilliant ideas, particularly during the breakout session. This taught us to be compassionate, to respect other faculty, and to share their bright ideas. Overall, hospitality of the PTO hotel was excellent. –Participant, TTT Chennai

Of all the courses I have been to, this was the best as far as getting participants involved and teaching us to teach! Thanks TTT! –Participant, TTT Chennai

Very well organized workshop, useful in educating and conducting; evaluating skills, method of communicating critical appraisal, preparing modules in short term, and breakout sessions were excellent. –Participant, TTT Chennai

As I join back the humdrum of clinical activities, I do reflect for the five amazing days that I have spent with you all with very fond memories. You really achieved your GOAL of making adult education "FULL OF FUN!" I thank you for the time and pain you took to make these days very exciting for me. Hope to keep in touch for years to come and benefit from your intellect and expertise. A BIG HOORAH TO U ALL!!! –Kshaunish Das

Furthermore, all participants agreed they would participate in future Train the Trainers workshops.

For more information on WGO's Train the Trainer Workshops visit http://www.world-gastroenterology.org/train-the-trainers.html

WGO – Rome Foundation Joint Symposium Summary

IBS – The Global Perspective

Prof. Eamonn M.M. Quigley, Author

Dept. of Medicine
National Univ. of Ireland, Cork
University Hospital
Cork, Ireland

Ami D. Sperber, MD, MSPH, Co-Author

Ami D. Sperber, MD, MSPH
Emeritus Professor of Medicine
Faculty of Health Sciences
Ben-Gurion University of the Negev
Beer-Sheva, Israel

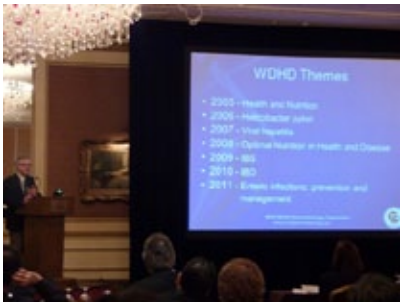
Douglas Drossmann, MD, Co-Author

University of North Carolina at Chapel Hill
Chapel Hill, NC, USA
President, Rome Foundation

Gastroenterologists throughout the world have long recognized the high prevalence of irritable bowel syndrome (IBS) among their patient populations and the challenges that the assessment and management of this disorder pose. However, a quick scan of the literature would suggest that IBS is a predominantly Western disorder and that studies of diagnostic and therapeutic approaches to IBS are the almost exclusive preserve of clinician-investigators in Europe and North America. To "set the record straight" and, in so doing, identify and attempt to address the additional challenges that IBS, as a truly global entity, presents, the Rome Foundation and the World Gastroenterology Organisation jointly organized an international symposium on "*IBS – The Global Perspective*" in Milwaukee, Wisconsin, USA, on April 6th and 7th 2011. For WGO, this symposium represented a logical extension of its prior activities in this area, the IBS Global Guideline (www.worldgastroenterology.org/irritable-bowel-syndrome.html), the WGO IBS Task Force and symposium presented at Gastro 2009 in London and the various activities and publications related to World Digestive Health Day (WDHD) 2009 (http://www.worldgastroenterology.org/wdhd-2009.html). The symposium set out to address two related issues:

1. To begin to draw a global picture of IBS. While IBS and all functional gastrointestinal disorders (FGID's) appear to have high prevalence rates throughout the world, many questions remain unanswered. Firstly, the world map of IBS still shows many blank spaces where prevalence data either does not exist or are fragmentary. Secondly, the potential for those interested in IBS around the world to learn from cultural and ethnic group similarities and differences relating to such factors prevalence, genetics, environmental factors, symptom reporting, gender distribution, pathophysiology, diagnostic workup, management, treatment approaches, patient adherence to treatments and clinical outcome remains largely untapped.
2. To address the importance of the development of cross-cultural clinical and research competencies. Cross-cultural clinical competence relates to the ability of health care providers to function optimally in the multicultural background of patients in many medical practices. Patterns of migration across and between continents now expose clinicians to a more diverse patient population drawn from different linguistic, ethnic and cultural backgrounds. Yet, as medical students and trainees we receive little or no instruction in the clinical approach to such patients when they present with a disorder such as IBS which is so encumbered by psychosocial dimensions. Cross-cultural research competence relates to the skills required to conduct research involving population subgroups of differing cultural and ethnic backgrounds.

The symposium was co-directed by Ami Sperber and Eamonn Quigley who were joined on the planning committee by Richard Hunt, Kok Ann Gwee and Carolina Olano, representing WGO, Douglas Drossman, Max Schmulson and Lin Chang,



Eamonn Quigley, Past-President of WGO, talks about the current and past themes of World Digestive Health Day, during the Rome Foundation-WGO Joint Symposium in April

representing the Rome Foundation, and Nancy Norton, representing the International Foundation for Functional Gastrointestinal Disorders (IFFGD).

As the program evolved it became clear that the two themes, a global look at IBS and multicultural competence were overlapping and closely intertwined. For example, in addressing the conduct of international clinical trials one has to confront the complexities of translating common symptoms; a word or phrase that we may take for granted as indicating or representing a specific symptom in English may simply not exist in other languages!

The scene was set by a thought-provoking key-note address by Byron Good from Harvard University in his discussion of "how symptoms mediate culture and biology". He introduced us to hermeneutics, the science of interpretation, and explored how language and culture interact to influence the interpretation of illness and the expression of symptoms. His concept of symptoms, accordingly, was not as a simple reflection of bodily processes, but as mediators between body, person, and cultural forms. This concept has special relevance for IBS where biomarkers are notable for their absence and the approach to the patient is based on symptoms alone. The relationships between culture and health were explored in further detail by Jon Stretzler and vividly illustrated by the differences in attitudes and therapeutic approaches to pain between the US and the rest of the world: Americans, who constitute only 4.6% of the world population, consume 80% of the global opioid supply! Paul Brodwin brought these concepts to bear on IBS and FGID's through his exploration of explanatory models of illness and emphasized how divergent the physician expert's and the patient's models may be. In so doing, he made it abundantly clear how important an understanding of a given patient's explanatory model may be and suggested how this may be approached.

The specific implications of differences in clinical presentation, range of potential differential diagnoses and available diagnostic armamentarium were explored by colleagues from Asia, Eastern Europe and Latin America, thus providing a more global picture of the clinical approach to IBS. Pathophysiology was also explored from a global perspective in individual presentations on genetics and ethnicity, the microbiota, food-related symptoms and the impact of psychopathology and stress. For many of these areas, data remains preliminary but comparative studies of candidate genetic markers or putative microbial signatures between, as well as within, different populations may well yield important insights. In a provocative review of the role of genetics in IBS, Nicholas Talley suggested that the available data on IBS prevalence, which is quite similar world –wide, would argue against a major contribution to its pathophysiology from ethnicity, genetics or even rates of exposure to infection!

How does the care of the patient differ in various cultural and geographical settings? If culture and ethnicity do not influence IBS prevalence, they certainly exert a profound impact on the care of the patient with IBS. Not only is the physician-patient interaction impacted by cultural and religious factors but access to health care per se may be precluded by these self same customs and beliefs and exacerbated by language barriers, in the influence of local healers and complicated by the use of folk remedies and other complementary and alternative practices. On a larger scale, multinational trials in IBS pose additional challenges which begin with the development and validation of study instruments such as questionnaires and are further complicated by variations between countries in the ethics of clinical research and approaches to subject recruitment. While the challenges and some of the ethical dilemmas posed by epidemiological and multinational clinical trials, in particular, were highlighted some success stories were also presented and some useful guidance for future international studies emerged. Once a new therapy has been developed, it must gain regulatory approval before it can reach the patient: presentations by representatives from the US, European and Japanese regulatory agencies highlighted the different approaches taken in these major jurisdictions, a source of much anxiety for clinician-investigators and pharmaceutical companies alike.

A panel of experts during the Rome Foundation-WGO Joint Symposium *"IBS – The Global Perspective"* in April.

Like all good meetings, this symposium generated vigorous discussion and, in truth, generated as many questions for future study as it provided answers. In the formal presentations as well as in break-out workshops the critical importance of cultural competency to the modern gastroenterologist caring for IBS patients was made abundantly clear; in parallel, the potential for truly international studies of IBS to shine new light on this fascinating but perplexing disorder was abundantly clear. There is much to be done and both Rome Foundation and WGO are committed to promoting a global approach to the study of IBS.

WGO Calendar of Events

Meeting:Falk Symposium 178, Diverticular Disease, A Fresh Approach to a Neglected Disease
Date: September 2 - 3, 2011
Website: http://www.drfalkpharma.de/veranstaltungen/internationale-falk-symposien-und-ws/2011/

Meeting: Falk Symposium 179, Revisiting IBD Management: Dogmas to be Challenged
Date: September 30 - October 1, 2011:
Website: www.drfalkpharma.de/veranstaltungen/ internationale-falk-symposien-und-ws/2011/

Meeting: Falk Symposium 180, IBD 2011: Progress and Future for Lifelong Management
Date: November 11 - 12, 2011,
Website: www.drfalkpharma.de/veranstaltun gen/ internationale-falk-symposien-und-ws/2011/

Meeting: 2nd APASL Hepatocellular Carcinoma Conference
Date: December 1-3, 2011
Website: http://www.apasl-stc2011.org

Meeting: 4th Hepatology and gastroenterology Post Graduate Course
Date: December 9-10, 2011
Website: www.egyptgastrohep.com

Meeting: ICE 2011 - International Congress of Endoscopy
Date: September 10 - 14, 2011
Website: www.ice2011.org

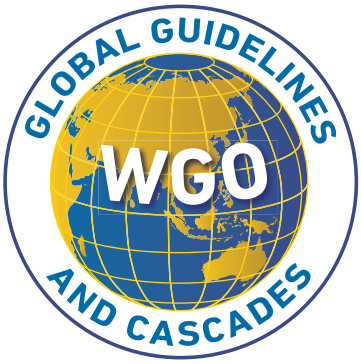
Meeting: Asian Pacific Digestive Week 2011
Date: October 1-4, 2011
Website: http://www.apdw2011.org.sg

Meeting: Gastro-Antalya 2011
Date: November 16-20, 2011
Website: http://www.wgo-turkey2011.org

Meeting: Canadian Digestive Diseases Week
Date: February 24 - February 29, 2012
Website: http://www.cag-acg.org

To view more details and a full listing of events, click here:
(www.worldgastroenterology.org/meetings-events.html)

Constructing the NASH - Cascades – Your Invitation to Help.



A Resource Sensitive Solution

A gold standard approach for the diagnosis and management of NASH is feasible for regions and countries where the full scale of diagnostic tests and medical treatment options are available. However, throughout much of the world, such resources are not available.

Definition: A cascade is a hierarchical set of diagnostic, therapeutic and management options to deal with risk and disease - ranked by resources available.

Professor Douglas LaBrecque has designed the Cascades for NASH . The two Cascades below represent a major intellectual achievement in Comparative Hepatology.

The cascades are under construction – further work is needed and we invite you to help by studying the various options for each resource level and judging their appropriateness and relevance for your region. Please send your comments to guidelines@worldgastroenterology.org – we would love to hear your feedback.

Diagnosis - cascade for limited/medium/extensive resources

Level 1 – limited resources	**Availability**	**Feasibility**	**Remarks**
Medical history and general physical exam to evaluate for risk factors	Limited medical training required	Access to patients	First step to identify potential patients
Test serum liver aminotransferases	Requires blood draw and limited laboratory facilities	Generally available	May be normal
Radiologic evaluation	Ultrasound if available	Not available is countries with fewer resources, especially in rural areas	Insensitive if <33% fat; cannot distinguish ASH from NASH
Patient history: alcohol abuse?	Critical part of patient history	Reliable history may be problem	>20 gm/day in females >30 gm/day in males
Serology to exclude viral hepatitis	HBsAg, HCV-Ab	Generally available in larger cities	May co-exist with NASH and exacerbate progression
Rule out other chronic liver diseases	Medical/Family history; specialized lab tests	Specialized tests less available, expensive	Cost/availability may be limiting
Liver biopsy and histology	Often unavailable	Likely will require referral to outside pathologist	Probably limited to largest cities and most prosperous citizens

Level 2 – medium resources	**Availability**	**Feasibility**	**Remarks**
Medical history and general physical exam to evaluate for risk factors	Limited medical training required	Access to patients	First step to identify potential patients
Test serum liver aminotransferases	Requires blood draw and limited laboratory facilities	Generally available	May be normal

Level 2 – medium resources, cont.	**Availability**	**Feasibility**	**Remarks**
Radiologic evaluation	Ultrasound	May be a problem in rural areas	Insensitive if <33% fat; cannot distinguish ASH from NASH
Patient history: alcohol abuse?	Critical part of patient history	Reliable history may be problem	>20 gm/day in females >30 gm/day in males
Serology to exclude viral hepatitis	HBsAg, HCV-Ab	Generally available	May co-exist with NASH and exacerbate progression
Rule out other chronic liver diseases	Medical/Family history; specialized lab tests	Specialized tests less available, expensive	Cost/availability may be limiting
Liver biopsy and histology	Available in larger centers	May require referral to outside pathologist	May be limited to largest cities and most prosperous citizens

Level 3 – extensive resources	**Availability**	**Feasibility**	**Remarks**
Medical history and general physical exam to evaluate for risk factors	Limited medical training required	Access to patients	First step to identify potential patients
Test serum liver amino-transferases	Yes	Generally available	May be normal
Radiologic evaluation	Ultrasound; MRI more quantitative	Generally available	Insensitive if <33% fat; cannot distinguish ASH from NASH
Patient history: alcohol abuse?	Critical part of patient history	Reliable history may be problem	>20 gm/day in females >30 gm/day in males
Serology to exclude viral hepatitis	HBsAg, HCV-Ab	Generally available	May co-exist with NASH and exacerbate progression
Rule out other chronic liver diseases	Medical/Family history; specialized lab tests	Generally available; expensive but important to rule out treatable co-existent diseases	Cost may be limiting
Specialized, non-invasive serum and radiological tests	Limited commercial or research labs, research programs	Expensive, limited availability	Lack of controlled, prospective trials validating tests; may be useful to identify patients with minimal or advanced disease and thus eliminate need for liver biopsy
Liver biopsy and histology	Generally available	Requires experienced pathologist	The definitive test to rule out other diseases, grade and stage disease; cannot reliably distinguish NASH from ASH

Management - cascade for limited/medium/extensive resources

Level 1 – limited resources	Availability	Feasibility	Remarks
Weight loss – diet, exercise, education	Limited training required for health care provider	Limited training required for health care provider	Lifestyle changes are single most effective weapon in treating NASH; enthusiastic support group very helpful
Diabetes control	One of key risk factors; well recognized health problem	Generally available	Essential to control if present
Lipid lowering agents	May be less available due to cost; dietary changes will also help if hyperlipidemia present	Require resources for medications, training of health care providors	Important to control if present
Vitamin E	Likely not available		
Weight loss – bariatric surgery	Not available		
Insulin sensitizers	Not available		
Liver transplantation	Not available		

Level 2 – medium resources	Availability	Feasibility	Remarks
Weight loss – diet, exercise, education	Limited training required for health care provider	Limited training required for health care provider	Lifestyle changes are single most effective weapon in treating NASH; enthusiastic support group very helpful
Diabetes control	One of key risk factors; well recognized health problem	Physicians, nurses, dietitians more often available with appropriate training	Essential to control if present
Lipid lowering agents	May be less available due to cost; dietary changes will also help if hyperlipidemia present	Physicians, nurses, dietitians more often available with appropriate training	Important to control if present
Vitamin E	Likely available	Simple, minimal side effects	Prospective, controlled trial: 40-44% improved; no change in fibrosis or insulin resistance
Insulin sensitizers, antidiabetics	Likely available	Requires properly trained health care provider; close monitoring; long term therapy	Relapse if stop; possible loss of effect over time; potential serious side effects (cardiac); experimental at this time; consider when above therapies ineffective
Weight loss – bariatric surgery	Not available		
Liver transplantation	Not available		

Level 3 – extensive resources	Availability	Feasibility	Remarks
Weight loss – diet, exercise, education	Well trained health care providers available	Well trained doctors, nurses, dietitians, exercise/ PT providors available	Lifestyle changes are single most effective weapon in treating NASH; enthusiastic support group very helpful
Diabetes control	One of key risk factors; well recognized health problem	Physicians, nurses, dietitians readily available with appropriate training	Essential to control if present
Lipid lowering agents	Readily available; dietary changes also essential	Physicians, nurses, dietitians readily available with appropriate training	Essential to control if present
Vitamin E	Readily available	Simple, minimal side effects	Prospective, controlled trial: 40-44% improved; no change in fibrosis or insulin resistance; 400 IU BID of natural form of vitamin E
Insulin sensitizers, antidiabetics	Readily available	Require properly trained health care provider; close monitoring; long term therapy	Relapse if stop; possible loss of effect over time; potential serious side effects (cardiac); experimental at this time; consider when above therapies ineffective
Weight loss – bariatric surgery	Widely, although not universally available	Major surgery; still requires extensive lifestyle changes; likely not available if patient already cirrhotic, has portal hypertension	Consider early, before patient has cirrhosis/portal hypertension; shown to reverse many of problems of NASH/metabolic syndrome
Liver transplantation	Generally available in high resource countries, but not in all centers or cities	Generally not available to patients with BMI>45 (>35 in some centers)	NASH may recur or develop de novo in transplanted liver

Radiation Protection for Gastroenterologists

Prof. Dr. Henry Cohen

Vice President, WGO
Montevideo, Uruguay

Dr. Asadur Tchekmedyian

Hospital Pasteur
Montevideo, Uruguay

The mission of The World Gastroenterology Organisation (WGO) as a global leader of gastroenterologists around the world is the provision of high quality, accessible and independent education and training. One of the programs that allows WGO to accomplish its mission is the production of guidelines, which are translated into 6 languages and freely available on the society's website (www.worldgastroenterology.org). The uniqueness of WGO´s guidelines is the existence of so called 'cascades' that permit to adapt guidelines according to the resource levels of different countries.

The involvement of gastroenterologists in endoscopy practice has considerably increased and endoscopy has changed from a diagnostic procedure to a more complex, demanding and interventional technique. In several cases this requires fluoroscopy with the exposure to radiation of both staff and patients. In all circumstances in which fluoroscopic or x-ray equipment are used, gastroenterologists should minimize the risks to patients, to themselves, and to other members of the staff. It is essential to establish the appropriate indication for the use of radiation in all circumstances, in order to avoid unnecessary exposure of patients and staff to potentially harmful radiation.

Radiation protection measures have been implemented in numerous referral centers around the world. However, there are still clinical centers where gastroenterologists have no formal training in radiation safety due to a lack of a universal legal framework or educational support. It is our aim that the best practice according to the level of locally available resources can be applied in every place where GIs perform interventional procedures applying fluoroscopy.

The International Atomic Energy Agency (IAEA) has conducted several training courses for non-radiologists and non-cardiologists that included gastroenterologists and other disciplines, such as orthopedic surgeons, urologists, gynecologist, vascular surgeons and neurosurgeons. The first course has been held in Auckland, New Zealand in September 2006, followed by Dubai (2007), Montevideo (2008) and Sofia, Bulgaria (2008). Doctors from over 33 countries have participated in these training activities. After our participation in some of these courses we formally started our cooperative work with the IAEA establishing a partnership between WGO and IAEA who is part of the United Nations Organization. This initiative has been possible thanks to the support of Dr. Alejandro Nader and Dr. Madan Rehani, officers of IAEA, and Dr. Ariel Duran, a cardiologist who opened us the doors to IAEA.

The worldwide problem of radiation exposure in gastroenterology practice is growing daily. We need to act before we see eminent cases of radiation overexposure. Wisdom demands preventive actions before accidents create compelling situations. Every preventative measure requires team work in order to be effective.

As a first step, a joint committee of ASGE (American Society of Gastrointestinal Endoscopy), IAEA and WGO, prepared a global guidelines on radiation protection in endoscopy suite that is available on the website of WGO.[1]

In April 2010, WGO organized a meeting of Latin American endoscopists in Montevideo, Uruguay, with the invaluable support of IAEA. The continued enthusiasm and mutual cooperation led us to establish a network of gastroenterologists engaged in radiation protection that is still ongoing. As part of this network a newsletter for Latin-America is published twice a year and despite its regional focus it could be a powerful

tool to share information among our colleagues in the rest of the world since it is published in English and can be accessed online.

At the web site of the IAEA[2] information on radiation protection useful links can be found in English, Spanish and Portuguese as a result of our co-operative work. We are very happy of this multi-society venture and express our gratitude to all members of the network carrying the torch forward.

It is our wish that this message reaches every GI endoscopist worldwide and that our aims are fulfilled providing radiation safety in gastroenterology practice. We invite colleagues from all 110 countries and 4 regions of WGO to contact us to start new radiation protection initiatives in their countries or regions. WGO and IAEA will provide all the necessary tools to improve awareness on radioprotection in the world of gastroenterology.

REFERENCES

1. http://www.worldgastroenterology.org/radiation_protection_in_the_endoscopy_suite.html

2. http://rpop.iaea.org/RPOP/RPoP/Content/InformationFor/HealthProfessionals/6_OtherClinicalSpecialities/gastroenterology/index.htm