The year 2014 in the REVISTA DE GASTROENTEROLOGÍA DE MÉXICO

El año 2014 en la REVISTA DE GASTROENTEROLOGÍA DE MÉXICO

2014 has been a very interesting year for the REVISTA DE GASTROENTEROLOGÍA DE MÉXICO, with the publication of innovative and up-to-date articles spanning the entire spectrum of gastroenterology.

In regard to the original articles published, the studies on genes associated with colon cancer in Mexico and Colombia stand out. The former, conducted in Veracruz-Mexico, analyzed the survival rate in patients with the mutated K-ras gene compared with those possessing the wild-type K-ras gene and found no differences between the two groups. Even though the results are related to the small sample size, it is significant that this type of research is being done in Mexico. The latter study, carried out in Medellín-Colombia, analyzed the mutations of the APC, K-ras, and TP53 genes, not only in patients with colorectal cancer, but also in those presenting with gastric cancer. They reported that the APC gene was the most frequently mutated in all of the patients. Mutations were 3-fold more common in the colorectal carcinoma samples than in the gastric cancer ones, indicating the presence of different genetic pathways involved in the development of the two tumors. In his editorial on this subject, Llor emphasizes the importance of understanding the molecular mechanisms involved in the carcinogenic processes of these tumors, which can modify patient treatment, in the so-called precision medicine.

Helicobacter pylori (H. pylori) has been considered the prime risk factor for chronic gastritis, ulcer, and gastric cancer, and has been associated not only with environmental, but also bacterial factors, and the immune response to this infection. In the current issue of the journal, Martinez-Carrillo et al. reported that even though the percentage of cells expressing IFN-γ was not related to H. pylori infection in either of the two study groups, it was lower in the patients with chronic gastritis infected with H. pylori vacA m2/cagA than in those infected with the other genotypes; these differences were not found in the patients presenting with gastric cancer. Whether the different strains produce distinct grades of gastric inflammation remains to be determined. Regarding treatment, a systematic review found that the H. pylori eradication rates with the standard triple therapies are very low, under 80% in countries in which there is a high resistance to clarithromycin and metronidazole, as is the case in Latin America. This does not appear to improve with the addition of bismuth and although there are better results with quinolone-based therapies, higher doses and more prolonged treatments are required.

From the metabolic perspective, obesity has been associated with low-grade inflammation and immune activation. With respect to this, Rojano-Rodríguez et al. described a linear relation of CRP to weight and body mass index. CRP was also significantly reduced after gastric bypass or gastric sleeve surgery, but this decrease was not linear.

It remains to be seen whether the reduction of this marker after surgery is also related to a decrease in the risk for pathologies associated with obesity, such as cardiovascular diseases.

On another topic, total serum calcium and albumin-corrected calcium above 7.5 mg/dl during the first 24 h were shown to be useful predictors of acute pancreatitis severity, with a sensitivity and specificity similar or superior to those of other scales, including the Ranson and APACHE-II-scores. Nevertheless, as Peláez-Luna points out, the results of this study must be validated and reproduced, because even though calcium is a low-cost test that is very accessible at the clinical level, it does not have the best likelihood ratio when moderately severe patients are taken into account, and so from the biostatistical viewpoint, does not appear to be superior to the currently available markers and scales.

In the field of hepatology, in this last issue of 2014, the clinical characteristics, risk factors, and diagnostic approach in patients with giant and conventional hepatic hemangiomas are compared. It should be kept in mind that hemangiomas are the benign hepatic tumors most frequently found in daily practice. The study states that giant hemangiomas are more frequent in women and
are associated with oral contraceptives. The majority of these tumors are asymptomatic, but in the one-third of patients that manifested symptoms, abdominal pain was the most frequent complaint. Likewise, Galicia-Moreno and Gutiérrez Reyes reviewed the role that oxidative stress plays in ethanol-induced liver damage. Reactive oxygen species and reactive nitrogen species are molecules formed during ethanol metabolism that alter the biologic processes of the liver and sensitize hepatocytes to the proinflammatory cytokines. Even though the antioxidant effect of substances such as N-acetylcysteine, corticoids, silymarin, and metadoxine, among others, have been studied, well-designed trials are needed in order to determine their effectiveness in these patients. Likewise, the currently available biomarkers have been reviewed in relation to the study of liver fibrosis. This is an important aspect of clinical practice, given that the use of noninvasive techniques would enable adequate diagnosis and disease stage determination, and could possibly evaluate therapeutic response. In regard to another theme, reports in the literature have associated posttransplantation diabetes with acute liver rejection, infections, and other complications. In their study, Builes-Montaño et al. encountered hyperglycemia in 94% of patients in the first 48 h after liver transplantation, but this condition was not associated with a greater risk for rejection, infections, or longer hospital stay. These results contradict those previously described, as analyzed by Vilatoáb Chapa in his editorial, and could be related to the retrospective nature of the study or to the cut-off point the authors utilized (> 140 mg/dl) for determining hyperglycemia; this merits further investigation.

In relation to irritable bowel syndrome (IBS), an extensive evidence-based review has concluded that the microbiota of these patients is different from that of the controls, but a microbiota that is characteristic of patients with this functional bowel disorder has yet to be established; this is possibly due to the diversity of methods used in the studies or to limitations in the sequencing technologies. The future will determine whether an IBS-specific microbiota can be identified through the use of ‘next generation’ and other novel technologies. There is also a need for well-designed studies to establish if differences in low-grade inflammation exist between patients presenting with post-infectious IBS and those with idiopathic IBS. A study in the area of pediatric gastroenterology reported on the importance of determining the presence of gastroesophageal reflux in children that are allergic to cow’s milk, given that the symptoms of these two entities are similar and one-third of the patients presenting with this allergy also had gastroesophageal reflux.

Concerning novel endoscopic techniques, the results of a report on the usefulness of the EndoLifter for endoscopic dissection of the submucosa in a porcine model included a high success rate and short surgery duration. This device facilitates dissection by reducing the number of injections into the submucosal space, preventing deeper dissections; it also enables traction and allows surgical instruments to be directed into the desired area with precision. Likewise, the use of elastography can improve the diagnostic accuracy of endoscopic ultrasound and fine-needle aspiration biopsy in the evaluation of pancreatic lesions. And in the realm of teaching, a study conducted in Argentina showed that the supervised participation of residents-in-training in colonoscopies had a positive impact on the detection of adenomas in these procedures.

Finally, our journal has been characterized by the constant publication of clinical cases, case series of patients, scientific letters, and clinical images, all of which are useful to the clinician who confronts a wide spectrum of gastroenterologic problems in the daily management of his or her patients. In addition, the Revista de Gastroenterología de México is now a bilingual journal, published simultaneously in Spanish and English. All articles can be accessed online directly through PubMed, making our journal available to a worldwide audience, and most certainly, increasing its impact factor.

And so 2014 is coming to an end, the last year in the triennium of a great concerted effort to turn the Revista de Gastroenterología de México into a journal of excellent quality, and without a doubt, a leader in the specialty in Latin America. A promising future lies ahead....

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Conflict of interest

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M. J. Schmulson W. * Corresponding author: Laboratorio de Hígado, Páncreas y Motilidad (HIPAM), Departamento de Medicina Experimental, Facultad de Medicina, Universidad Nacional Autónoma de México (UNAM) Hospital General de México, Mexico City, Mexico

E-mail address: maxjulio@prodigy.net.mx