Online Submissions: wjg.wjgnet.com
www.wjgnet.com
wjg@wjgnet.com

World J Gastroenterol 2008 February 21; 14(7): 994
World Journal of Gastroenterology ISSN 1007-9327

TOPIC HIGHLIGHT

Pier Alberto Testoni, MD, Associate Professor, *Series Editor*

Recurrent acute pancreatitis: From the editor

This special issue of *World Journal of Gastroenterology* contains a number of articles focusing on acute recurrent pancreatitis, a clinical entity that still remains a complex diagnostic and therapeutic challenge in clinical practice. Recurrent bouts of pancreatitis mainly occur in a gland which shows a normal morphology of both parenchyma and pancreatico-biliary ductal system at the time of diagnosis, when standard investigation is used; however, the introduction of ultrasound endoscopy (EUS) in clinical practice allowed us to identify mild to moderate ductal and parenchymal alterations in a relevant part of these patients, suggesting a chronic process, observed either at the onset of the disease or during the follow-up period. These pancreatic abnormalities can either suggest the presence of an underlying chronic process which evolves over time with recurrent attacks of acute pancreatitis or can be the consequence of multiple, self-limiting acute inflammatory episodes that induce persistent lesions within the gland with time.

It is generally believed that, in about 70% of cases, a correct aetiological diagnosis is achieved by means of clinical history, laboratory tests, and standard imaging techniques, including CT scan, magnetic resonance cholangio-pancreatography (MRCP), and endoscopic retrograde cholangio-pancreatography (ERCP).

Another significant improvement in the knowledge of aetiological factors has been achieved by the introduction of sphincter of Oddi manometry, microscopic search for bile crystals in the collected bile, and testing for cystic fibrosis transmembrane conductance regulator-gene (CFTR) and other genetic (SPINK1, PRSS1) mutations. Sphincter of Oddi manometry and the search for bile crystals may improve the diagnostic yield in patients in whom both pancreatico-biliary junction and ductal system have a normal appearance. By these techniques, the major role played by the sphincter of Oddi dysfunction, either of the biliary or pancreatic segment, and bile sludge or microlithiasis has been revealed in the occurrence of idiopathic recurrent pancreatitis. However, manometric investigation of the sphincter of Oddi may fail to document some dysfunction in a progressively increased percentage of patients in type 2 and 3 dysfunction, respectively, when the need for definite findings is highest. The introduction of the Secretin test, done by either MRCP or EUS investigation, has been documented to provide a more detailed visualization of the pancreatic ductal system and indirect information about the sphincter of Oddi function, avoiding ERCP-related risks.

The aim of the present topic highlights is to provide a comprehensive overview of the current knowledge and unsettled issues on recurrent acute pancreatitis, including aetiological factors, diagnostic and therapeutic procedures, and clinical management.