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Pancreatic and Biliary Disorders in Asians



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Abstract

The majority of pancreatobiliary conditions in Asia are identical to those encountered in the western countries. With improved public hygiene and modified eating habits, the epidemiology of these diseases in Asia is changing. For instance, primary choledocholithiasis was once the dominant gallstone treated in Japan and Taiwan. Today, most of the common bile duct stones seen in these countries are the result of stone passage from the gallbladder. Environmental factors are presumed to be the heavy contributor to the differences between such diseases seen in the East and West, but genetics must play a role as well. Therefore, the lower incidence of pancreas divisum and higher incidence of choledochal cysts in Asians is likely to remain the same regardless of immigration. On the other hand, tropical pancreatitis occurs only in individuals who grow up in southern India and some other nations in the tropics.

There are some interesting features about neoplastic conditions of the pancreaticobiliary system in Asians. Gallbladder and bile duct cancers are far more common in Japan than in the West. Virtually incurable because of late presentation, these cancers are usually suspected only when they produce painless obstructive jaundice. In spite of the dismal final outcome, biliary and gallbladder cancers are quite amenable to stenting, and survival for two to three years is common. Some predisposing factors to bile duct cancer in Asians may be related to higher incidences of chronic biliary infestations, biliary adenoma and choledochal cyst. In Southern California, the majority of patients with choledochal cysts are from Vietnam, China, Japan and the Philippines. The CT or ultrasound finding of a very large bile duct in a young adult should alert the physician to cystic disease of the bile duct. Surgical resection of the cystic bile duct segment is the treatment of choice.

As in the United States, pancreatic cancer is among the most common neoplastic conditions in Asia. But a unique form of pre-malignant condition of the pancreas, mucinous ductal neoplasm, is more common in Asia than in other regions of the world. Also known as mucinous ductal ectasia, the pancreatic duct is engorged with mucin produced by neoplastic cells lining the pancreatic duct. The disease is best documented by ERCP. The endoscopic view of a markedly dilated pancreatic sphincter, filled with a large drop of mucin, should raise a strong suspicion of this condition. A typical pancreatogram would reveal an ectatic pancreatic duct with lumpy bumpy changes in the head of pancreas and its lumen filled with ill-defined mucinous defects. This condition is different from the more common cystadenoma or cystadenocarcinoma of the pancreas. The latter problem is seen more in middle age females whose pancreatic duct is usually normal. These mucin-filled adenomas generally do not communicate with the pancreatic duct.

Primary bile duct stones are thought to form as a result of chronic biliary contamination by bacteria or parasites. In Hong Kong, where this disease is most prevalent, clonorchis infestation of the bile duct is also very commonly seen. In the extreme form of this disease, the name, recurrent pyogenic cholangitis, applies. It is a cyclical problem of subclinical cholangitis, stricture formation and build up of brown pigment gall stones. In long-standing disease, cholangiocarcinoma may occur as a result of many years of inflammation. But the most problematic aspect of this disease is recurrent cholangitis which is extremely difficult to treat. Patients are commonly treated with a combination of cholecystectomy, ERCP stone extraction, bilioenteric bypass, stenting and even partial hepatectomy. But procedure related morbidity in inexperienced hands is rather high.

An equally intriguing and problematic condition of the pancreas is that of tropical pancreatitis. Without a definite known cause, this disease is seen nearly exclusively in southern India where alcohol is rarely consumed. Clinically and radiologically, tropical pancreatitis is inseparable from the usual variety of chronic pancreatitis. Chronic pain and severe maldigestion are common features. Unlike recurrent cholangitis, biliary or pancreatic parasites such as ascaris are not considered to be related to this condition. Japanese physicians have recently reported on an autoimmune form of pancreatitis. Whether it represents a new entity is still uncertain.

Asthenia and malnourishment are still common in some regions of Asia. It is a common practice of some Vietnamese and Korean physicians to prescribe pancreatic digestive enzymes to their patients. The exact rationale and outcome of this practice are uncertain. Some physicians claim improvements of their patient's weight and general well-being. Whether that represents some subtle form of pancreatitis or pancreatic insufficiency in these Asians is uncertain.

It is obviously not possible to highlight all the unique aspects of pancreaticobiliary conditions that may affect an Asian or American of Asian descent. An increased general awareness of the different diseases should benefit both the patient and his physician.