

Is idiopathic recurrent pancreatitis attributed to small stones?

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Abstract

Idiopathic recurrent pancreatitis remains a clinical challenge. Intraductal ultrasonography in the management of idiopathic recurrent pancreatitis may be a new strategy for undetermined causes after initial diagnostic approaches, including endoscopic retrograde cholangio-pancreatography (ERCP). However, no definite cause after ERCP should be defined under optimal settings and with experienced technique.

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Key words: Endoscopic retrograde cholangio-pancreatography; Idiopathic recurrent pancreatitis; Biliary stone

Core tip: The diagnosis of patients with idiopathic recurrent pancreatitis was revised after intraductal US used the criterion of 0.2-0.3 cm for common biliary duct stones. This implied that endoscopic retrograde cholangio-pancreatography (ERCP) could not be effective

for identification of small biliary stones. For a more perfect ERCP study, an ERCP endoscopist should be aware that ERCP is a dynamic study, rather than image reading alone, and it should be possible to select an appropriate concentration of contrast medium for different conditions. Thus, even small stones could be detected without a second diagnostic tool.

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TO THE EDITOR

We read with interest the paper by Kim *et al*^[1] entitled "The role of intraductal US in the management of idiopathic recurrent pancreatitis without a definite cause on endoscopic retrograde cholangio-pancreatography (ERCP)". It is difficult to identify possible causes and make a definite diagnosis in cases of idiopathic recurrent pancreatitis^[2]. The authors provided some ideas about the diagnostic process of idiopathic recurrent pancreatitis with intraductal US. However, they did not find biliary stones initially by an ERCP study in cases that were defined as idiopathic recurrent pancreatitis. Their revised diagnosis after intraductal US used the criterion of 0.2-0.3 cm for common biliary stones. This implied that ERCP could not be effective without identification of small biliary stones. We strongly disagree with this implication. In our opinion, ERCP depends on the endoscopist's experience and technique.

Therefore, several points need to be clarified. Firstly, and most importantly, every ERCP endoscopist should be aware that ERCP is a dynamic study, rather than an image reading alone. Once contrast medium is injected into the biliary tract, fluoroscopy should be performed.

Any filling defect, contrast medium flow direction and pressure resistance should be monitored by the endoscopist. It is difficult to clearly define the injection pressure, which may be applied according to individual perception. However, any suspicious lesion should be reviewed immediately on X-ray film because X-ray film is better than fluoroscopy for identifying lesions.

Secondly, an experienced ERCP endoscopist should be able to select an appropriate concentration of contrast medium for different conditions. The radiation quantities depend on concentration of contrast medium, fluoroscopy time and total radiation^[3]. Clinical experience suggests that small gallstones within large ducts may be better imaged with dilute contrast, whereas strictures and pancreatic duct anatomy are better imaged with full-strength contrast^[4]. A concentration of about 50%-100% (150-300 mg iodine/mL) is usually used to identify opacified stricture lesions and a 25%-30% concentration is used to identify small filling defects in the common bile duct. With a higher concentration of contrast medium, small lesions may be omitted.

Thirdly, ERCP is highly technical and depends on the

endoscopist's experience^[3]. An experienced endoscopist should have clear concepts, skillful technique and the ability to identify most lesions in an ERCP study. A second diagnostic tool should not be a routine procedure for ERCP.

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