Endoscopic management of Wirsungocele with recurrent acute pancreatitis

Cystic dilatation of the terminal ventral main pancreatic duct was first termed Wirsungocele in 2004 following an incidental finding [1]. The association between Wirsungocele and recurrent acute pancreatitis was first reported by Gupta et al. [2]. A potential etiology has been proposed involving dysfunction of the autonomic innervation of the sphincter of Oddi, causing non-coordination and functional obstruction at the papillary orifice, resulting in Wirsungocele [3]. However, the definite pathophysiological mechanism for formation of Wirsungocele and the association with recurrent acute pancreatitis remain uncertain. We describe here a case of the youngest patient diagnosed with Wirsungocele with recurrent acute pancreatitis reported to date in the literature.

A 7-year-old boy with unremarkable antenatal and postnatal history presented with three episodes of acute pancreatitis within 2 months. Blood tests showed a high amylase level (peaked at 4011 U/L, reference range 29–118 U/L) and normal liver function tests. Ultrasonography showed acute pancreatitis, with normal biliary tree system and no gallstone. Magnetic resonance cholangiopancreatography revealed prominent ventral main pancreatic duct and a cyst near the distal end of the ventral duct, compatible with a Wirsungocele (Fig. 1).

He underwent endoscopic retrograde cholangiopancreatography (ERCP). Pancreatogram showed a 1.3-cm cystic dilatation of the ventral main pancreatic duct just beyond the major papilla. Pancreatic sphincterotomy was performed, followed by dilation with a 6-mm balloon. A 5 Fr × 5 cm, single-pigtail, pancreatic stent was inserted (Video 1).

At the 4-week follow-up after ERCP, the patient was asymptomatic and the pancreatic stent was removed. He remained well with no more attacks after 3 months of the follow-up.

In conclusion, this is the first video-reported case of a Wirsungocele with recurrent acute pancreatitis that was successfully treated with endoscopic sphincterotomy and balloon dilation.

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Competing interests

Prof. Teoh is a consultant for Boston Scientific, Cook, Taewoong, and Microtech Medical Corporations.

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Video 1: Endoscopic retrograde cholangiopancreatography for the Wirsungocele.

Fig. 1: Magnetic resonance cholangiopancreatography showed cystic dilatation near the distal end of the ventral duct compatible with Wirsungocele.
References


Bibliography

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