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Transduodenal accessory papillary Rendezvous technique assisted ERCP in the treatment of severe pancreatic duct stenosis caused by chronic pancreatitis in children

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Dear Editor,

Chronic pancreatitis in children is an irreversible inflammatory disease, which can cause intractable abdominal pain and abnormal internal and external secretion function of the pancreas, seriously affecting the growth and development of children and the quality of life. ERCP has become the first choice because of its good effect.
and less trauma. However, the severe stenosis of pancreatic duct caused by chronic pancreatitis may make ERCP more difficult. Here we used the rendezvous technique to assist ERCP to complete the treatment of severe pancreatic duct stenosis and abdominal pain.

**Case report**
A 12-year-old child was admitted to our hospital with chronic pancreatitis. The patient was diagnosed with severe pancreatic duct stenosis by CT and MR. ERCP was performed for the patient. Pancreatic duct opacification through the main duodenal papilla revealed severe stenosis in the pancreatic duct at the neck of the pancreas. We applied various guide wires, but none of the guide wires could reach the distal pancreatic duct. Surprisingly, the guide wire bends back through the narrow site and enters the duodenal cavity through the accessory duodenal papilla. We came up with the technique of rendezvous. And we completed the transduodenal auxiliary papilla cannula through the technique. The guide wire was sent to the distal pancreatic duct without a hitch.
We dilated the stenosis site so that we could subsequently complete the ERCP from the main duodenal papilla. Meanwhile, we chose to place a fully covered metal stent (FCMS) and a plastic stent. We also fixed the metal stent with a metal clamp. The plastic stent was placed to drain the branch pancreatic duct and avoid the blockage of the branch pancreatic duct by FCMS. The patient's pain was relieved after surgery, and stent removal was performed on the patient 1 month after ERCP.

**Discussion**
The therapeutic goals of chronic pancreatitis in children are to remove etiology, control symptoms, improve internal and external pancreatic secretion dysfunction and prevent complications\(^1\)\(^\text{-}^3\). ERCP has been applied to children since the late 1970s, and the complete and partial remission rates of abdominal pain can reach 63.6% and 23.6%.\(^4\) This case mainly provides an idea for such patients to consider the method of transduodenal accessory papillary rendezvous technique to complete ERCP. Moreover, the safety and effectiveness of FCMS in the treatment of refractory
stenosis caused by chronic pancreatitis in children are very high. It is hoped that it will be helpful to the majority of endoscopists.

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References


FIGURE: a: Pancreatic duct angiography through the main duodenal papilla revealed
severe stenosis in the pancreatic duct at the neck of the pancreas and a reversed guide wire. b: The guide wire bends back through the narrow site and enters the duodenal cavity through the accessory duodenal papilla. c: The transduodenal accessory papilla cannula was successfully intubated with the assistance of the rendezvous technique. d: We used a balloon to dilate the stenosis site. e: After dilating the stenosis, the guide wire was successfully intubated through the main duodenal papilla, and the guide wire passed through the stenosis smoothly. f: A FCMS and a plastic stent were placed in the pancreatic duct.