Fluoroscopically guided removal of a retained sheared guidewire following failed endoscopic ultrasound-guided pancreatic duct drainage

A 50-year-old man with a retained sheared guidewire in the main pancreatic duct and pancreatic parenchyma was referred for recurrent pancreatitis. He had previously undergone a pancreaticoduodenectomy for pancreatic hemangiomma and was experiencing recurrent pancreatitis due to pancreaticojejunal stenosis. Endoscopic ultrasound-guided pancreaticogastrostomy (EUS-PG) had been attempted at another hospital. However, this procedure had failed, and part of a 0.035-in guidewire (Roadrunner; Cook Medical, Bloomington, Indiana, USA) was retained in the pancreatic duct and pancreatic parenchyma (Fig. 1).

At our hospital, EUS-PG revealed a stricture in the pancreaticojejunal stenosis through which the guidewire could not pass. A fully covered, self-expandable metal stent, 6 mm in diameter and 8 cm in length (M.I.Tech, Seoul, Korea) was placed at EUS-PG.

The patient was readmitted for removal of the retained guidewire and stent revision 6 weeks after the transmural stenting. After removal of the metal stent, pancreatography conducted through the fistula showed a decompressed pancreatic duct. Because the tract had matured as a result of use of the metal stent, a rat-tooth grasping forceps (FG-8L-1; Olympus, Tokyo, Japan) could move freely through the pancreatic duct under fluoroscopic guidance with a 0.025-in guidewire placed through the PJ stricture. The retained guidewire was successfully grasped with the forceps and removed (Fig. 2). The stricture in the pancreaticojejunal stenosis was managed with balloon dilation and transmural and transanastomotic placement of a 7-Fr double-pigtail plastic stent.

EUS-PG may be useful when transpapillary access is unavailable. However, various complications can occur, such as pancreatitis [1, 2]. Guidewire shearing is not uncommon and is regarded as a serious, reportable adverse event [3, 4] that can lead to complications. In the current case, EUS-guided pancreatic drainage with a fully covered, self-expandable metal stent allowed opening of the high profile fistula and pancreatic duct for simultaneous removal of the retained guidewire and treatment of the pancreaticojejunal stenosis stricture. This case may help with the future management of guidewire shearing complications associated with EUS-guided procedures for drainage of the pancreatic duct.
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References

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