Use of a pre-positioned guide wire to aid in the removal of a pancreatic duct stent that had migrated further into the duct

Migration of a pancreatic duct stent further into the duct (proximal migration) after implantation is a relatively rare complication [1]. Various pieces of equipment such as a small balloon, snare, forceps, and grasping tripod have been used successfully to extract such stents [2–4]. However, their removal has proved technically challenging because of the narrow and tortuous shape of the pancreatic duct [2,4]. This report describes a new method for extraction of a proximally migrated pancreatic duct stent with the help of a pre-positioned guide wire.

A 16-year-old boy with recurrent acute pancreatitis caused by pancreas divisum (Fig. 1) was treated by implantation of a plastic stent into the pancreatic duct. Endoscopic retrograde cholangiopancreatography (ERCP) 1 month later showed that the pancreatic duct stent had migrated further along the pancreatic duct into the body of the pancreas (Fig. 2). After dilation of the minor pancreatic duct with an 8.5-Fr dilator, extraction of the stent was attempted using a snare and a basket, but both failed because they could not be fully opened in the pancreatic duct. A 1-cm balloon and a rat-tooth forceps were then tried, both of which were able to pull the stent out by a little bit. However, they were finally hampered by the sharp angle formed by the stent and the minor pancreatic duct in the pancreatic head because of the narrow and tortuous shape of the pancreatic duct (Fig. 3b,c). A second ERCP was tried 3 days later. First, a 0.035-Fr guide wire was placed in the pancreatic duct, which helped to keep the minor pancreatic duct in a relatively straight shape and in this way blunt the angle. A forceps was then inserted along the guide wire in the same working channel and finally grasped and successfully extracted the whole stent (Fig. 3d). The patient was discharged 2 days later without complications.

In this case, a proximally migrated stent was successfully extracted with the help of a pre-positioned guide wire. This method may be a good alternative option for other similar cases.
Competing interests: None

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References

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Endoscopy 2011; 43: E315 – E316
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

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