

Percutaneous foreign body retrieval through the biliary tract with the Nitinol Goose-Neck Snare

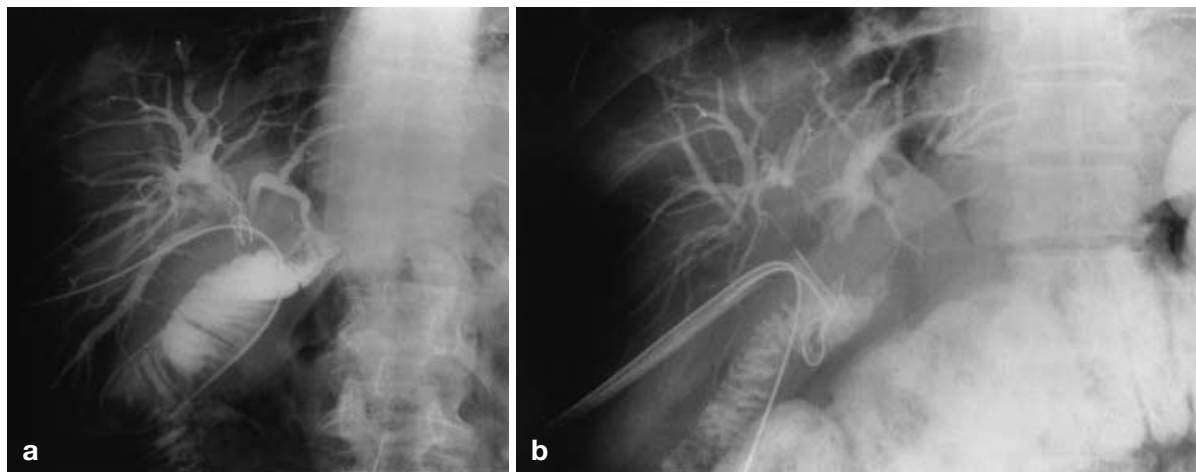
Sir,

Percutaneous intervention for nonvascular foreign bodies retrieval is well described [1, 2, 3]. However, cases of foreign-body removal from the biliary system are not so frequent. We have used the Nitinol Goose Neck Snare (NGNS) several times for percutaneous foreign-body retrieval through the biliary system. In the present letter we describe a representative retrieval case of a broken guidewire.

A 65-year-old man with biliodigestive anastomosis was referred with obstructive jaundice and cholangitis. Upper abdominal ultrasonography showed dilatation of the biliary tract with stones proximal to a presumed stenosed anastomosis. Diagnostic PTC was performed, and the diagnosis was confirmed. A 0.018 in. extrastiff guidewire with a 8-cm floppy platinum tip was placed through the needle into the bile duct. During the procedure, the soft platinum tip broke, with the proximal end fixed in the liver parenchyma and the distal one in the bile duct.

A puncture of another biliary duct was performed with successful placement of safety guidewire through the biliodigestive anastomosis (Fig. 1 a). A 9-F peel-away sheath was introduced and a 0.035 in. stiff-type curved-tip Terumo guidewire was manipulated through the sheath near the retained wire. The guiding catheter of the NGNS was subsequently introduced over it. The Terumo

Fig. 1. a Cholangiographic appearance of biliodigestive anastomosis. A 8-cm-long, 0.018-in. broken guidewire is partially lying in the biliary tract, while the straight part is in the liver parenchyma. **b** Through a peel-away sheath, the Nitinol Goose Neck Snare is introduced, and after appropriate manipulations the broken guidewire is snared and withdrawn



guidewire was withdrawn and the 40-mm loop snare wire was placed through the guiding catheter. After appropriate manipulation, we were able to catch the hanging wire and remove it (Fig. 1 b). The procedure was followed by a successful balloon dilatation of the stenosed biliodigestive anastomosis and the stones were removed through the anastomosis to the bowel. The patient is without symptoms for over 3 years.

Percutaneous procedures provide minimally invasive treatment for foreign-body retrieval and obviate the need for major surgery. Percutaneous removal from nonvascular spaces is less common, and only a few cases are described in the literature [1, 2, 3]. We found another similar case of retained platinum-tip fragment of an 0.018 in. guidewire [3].

Foreign bodies retained in the biliary tract must be retrieved as soon as possible in order to prevent obstruction and infection. The NGNS, available in five loop sizes, is presently the retrieval instrument of choice, due to its ease of manipulation, high radiopacity, great tensile strength, and the small diameter (4–6 F) of its guiding catheter.

References

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