A 67-year-old man was referred to our endoscopy unit by a surgeon for endoscopic removal of a fish bone suspected on computed tomography (CT). The patient was diagnosed with pancreatic cancer 3 years previously and underwent pancreaticoduodenectomy with R0 resection. Follow-up CT revealed a linear radiopaque structure traversing from the bile duct to the right lobe of the liver (Fig. 1, arrow), suggestive of a fish bone. He experienced vomiting once after eating a deep-fried sandfish 5 days earlier but had been asymptomatic since then. As he had no signs of cholangitis, he was followed on an outpatient basis for a while. However, CT performed 2 months later also indicated residual fish bone in the bile duct, and double-balloon endoscopy (DBE) was performed (Video 1).

DBE revealed a relatively wide-open choledochojunostomy anastomosis. By carefully observing inside the bile duct, a yellowish-brown structure piercing the bile duct wall was detected endoscopically (Fig. 2a, arrow). The object was grabbed with biopsy forceps. When pull tension was applied, bulging of the bile duct wall was observed on the distal side. The forceps were then pushed towards the proximal side, and a needle-shaped elongated object popped out into the bile duct (Fig. 2b). A balloon cholangiogram showed no contrast leakage (Fig. 3). The object was withdrawn into the scope channel and removed along with the endoscope. The removed object measured 3 cm long and was most likely the bone of a sandfish (Fig. 4).

Migration of fish bones to the bile duct is a possible complication following pancreaticoduodenectomy [1–3]. Intervention is controversial when the patient is asymptomatic, as some cases have been reported to disappear on subsequent CT [4]. However, considering the risk of stone formation and cholangitis, it seems reasonable to attempt endoscopic removal when migration remains on CT for a few months.
The authors declare that they have no conflict of interest.

Takuya Ishikawa¹, Hiroki Kawashima², Eizaburo Ohno¹, Masanao Nakamura¹, Suguru Yamada³, Masamichi Hayashi³, Mitsuhiro Fujishiro¹

¹ Department of Gastroenterology and Hepatology, Nagoya University Graduate School of Medicine, Nagoya, Japan
² Department of Endoscopy, Nagoya University Hospital, Nagoya, Japan
³ Department of Gastroenterological Surgery (Surgery II), Nagoya University Graduate School of Medicine, Nagoya, Japan

Corresponding author
Takuya Ishikawa, MD
Department of Gastroenterology and Hepatology, Nagoya University Graduate School of Medicine, 65 Tsuruma-cho, Showa-ku, Nagoya 466-8550, Japan
Fax: +81-52-7442785
ishitaku@med.nagoya-u.ac.jp

References


Bibliography
DOI https://doi.org/10.1055/a-1224-3724
Published online: 2020
Endoscopy
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

ENDOSCOPY E-VIDEOS
https://eref.thieme.de/e-videos

Endoscopy E-Videos is a free access online section, reporting on interesting cases and new techniques in gastroenterological endoscopy. All papers include a high quality video and all contributions are freely accessible online.

This section has its own submission website at https://mc.manuscriptcentral.com/e-videos

Fig. 3 Balloon cholangiogram performed after removal of the object showing no contrast leakage.

Fig. 4 A 3-cm-long object was removed from the bile duct and was most likely the bone of a sandfish.

Competing interests
The authors declare that they have no conflict of interest.


Ishikawa Takuya et al. Endoscopic removal of fish bone in bile duct... Endoscopy