

Title:

Needle knife assisted removal of the displaced metal stent

Authors:

Sen Liu, Lun Zhang, Shunchao Wang, Zhen Li, Jingzeng Pan, Peng Zhang

DOI: 10.17235/reed.2024.10781/2024

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Liu Sen, Zhang Lun, Wang Shunchao, Li Zhen, Pan Jingzeng, Zhang Peng. Needle knife assisted removal of the displaced metal stent. Rev Esp Enferm Dig 2024. doi: 10.17235/reed.2024.10781/2024.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Needle knife assisted removal of the displaced metal stent

First Author: Sen, Liu

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 513533008@qq.com

Second Author: Lun, Zhang

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 420709538@qq.com

Third Author: Shunchao, Wang

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 280697018@qq.com

Fourth Author: Zhen, Li

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 1214580433@qq.com

Fifth author: Jingzeng, Pan

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 109156251@qq.com

Corresponding Author: Peng, Zhang

Third Department of Surgery, Shenzhou Hospital, Hebei province

Email: 843685055@qq.com

Keywords: Needle knife. ERCP. Displaced metal stent.

Dear Editor,

The removal of a metal stent with proximal displacement was challenging(1). We present a case where a needle knife was used to incise the duodenal papilla to

remove the displaced metal stent.

Case report

An elderly man had a metal stent inserted because of a narrow bile duct. The patient had difficulty removing the stent after surgery and was referred to our hospital. Intraoperatively, we found that the patient's metal stent had been completely displaced into the common bile duct(Fig1a,b). We tried to remove the stent with a foreign forceps, which was like pulling a wire, and failed(Fig1c). We then incised the large duodenal papilla to the root with a needle knife, and then applied the needle knife to free the potential gap between the stent and the sphincter(Fig1d). After the end of the metal bracket was exposed, the metal bracket was removed with a snare(Fig1e,f,g). Two plastic scaffolds were then placed in the common bile duct and the incision was closed with a metal clamp(Fig1h).

Discussion

Metal stent displacement was relatively rare. Cases of peroral choledochoscope extraction have been previously reported(2). We present here a relatively rare treatment in which a needle-knife incision of the duodenal papilla exposes the tail end of the metal stent, thereby removing the metal stent. This provides a new way of treatment for such patients.

REFERENCES

1. Schmidt A,Suarez-Ibarrola R,Thimme R, et al. Holmium laser vaporization and percutaneous removal of a migrated endothelialized biliary self-expanding metal stent. VideoGIE. 2019;4 (6):269-270. doi:10.1016/j.vgie.2019.01.014
- 2.Rahimi E,Khuwaja S,Thosani N. Removal of a migrated fully covered metal biliary stent by cholangioscope-assisted inversion technique. Endoscopy. 2018;50 (11):E312-E313. doi:10.1055/a-0652-5251

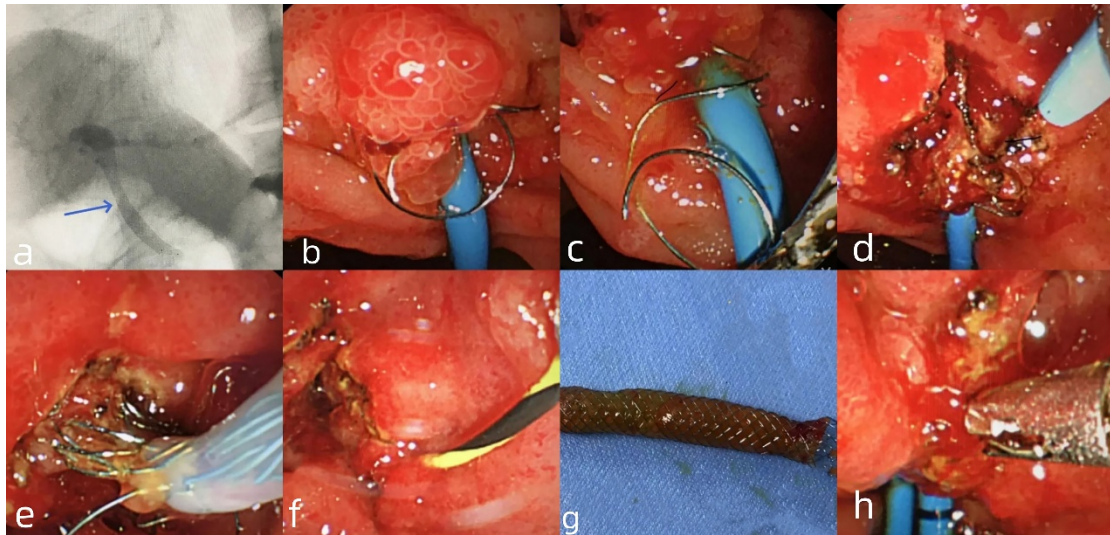


Fig1:

a: X-ray shows the stent retracted into the common bile duct.

b: Only a wire ring was visible at the duodenal papilla opening.

c: Attempts with foreign forceps were unable to remove the stent.

d: The duodenal papillary sphincter was incised with a needle knife.

e: The stent is removed with a snare.

f,g: The stent was removed from the body.

h: The bile duct stent was implanted and the duodenal papilla was sealed with a metal clamp.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

NO