

Guide wire-assisted technique to access the bile duct with biopsy forceps for repositioning and removal of metal stents

The malposition of a self-expandable metal stent (SEMS) placed fully inside the bile duct may be disastrous, and adjusting the position of a malpositioned stent can be difficult or impossible. Fully-covered SEMSs were designed mainly to treat benign biliary strictures and to be removable [1]. The removal process can however be difficult if the stent is placed fully inside the bile duct. Grasping the end of stent inside the bile duct directly with biopsy forceps may allow metal stents to be easily adjusted or removed. However, the front tip of a biopsy forceps is straight and hard, so access to the bile duct with biopsy forceps is difficult, especially via a native papilla without a sphincterotomy. Here, we present a simple method that facilitates the entry of biopsy forceps into the bile duct. First, a guide wire is deployed into the bile duct. Second, a serrated-edge biopsy forceps is used to grip the guide wire outside the papilla (◉ Fig. 1 a,b), and is then slid into bile duct while still gripping the guide wire (◉ Fig. 1 c). Finally, the forceps is used to grip the metal stent under radiographic guidance and to adjust or remove the stent as required (◉ Fig. 2). This guide wire-assisted technique for access to the bile duct with biopsy forceps is an extremely effective and simple technique that makes the adjustment and removal of metal stents placed within the bile duct more convenient and safe.

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Competing interests: None

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Fig. 2 Fluoroscopic images showing: **a** the biopsy forceps entering the bile duct; **b** a metal stent that had been placed fully inside the bile duct being removed by the biopsy forceps.

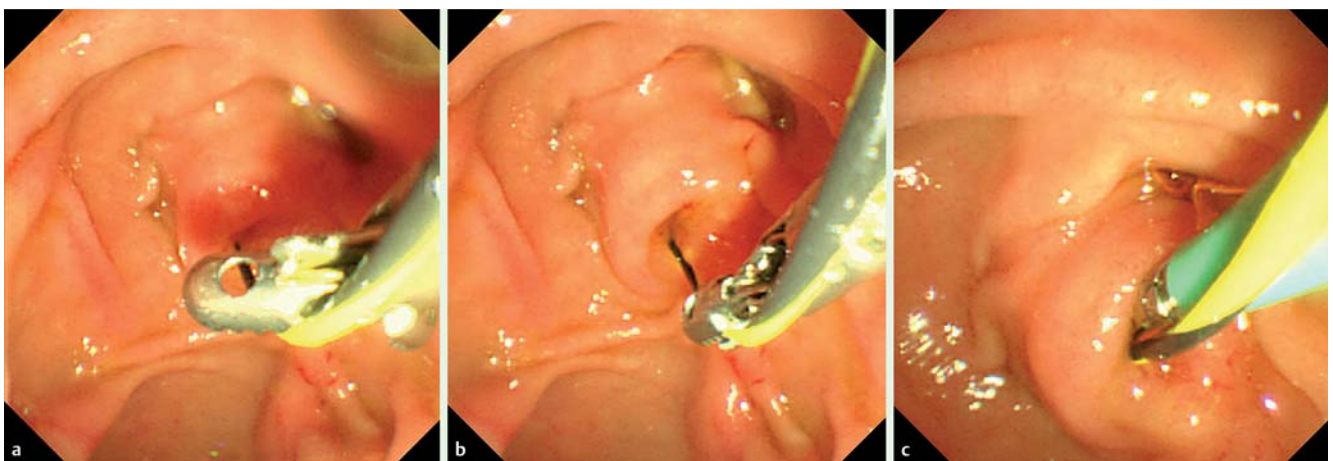


Fig. 1 Endoscopic images showing: **a** a serrated-edge biopsy forceps that is about to grip the guide wire previously placed into the bile duct; **b** the serrated-edge biopsy forceps gripping the guide wire outside the papilla; **c** the biopsy forceps being slid into the bile duct while still gripping the guide wire.

References

- 1 Mahajan A, Ho H, Sauer B et al. Temporary placement of fully covered self-expandable metal stents in benign biliary strictures: midterm evaluation (with video). *Gastrointest Endosc* 2009; 70: 303–309

Bibliography

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