

Title:

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DOI: 10.17235/reed.2023.9398/2022

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

Please cite this article as:

Qiao Zhenguo, Yin Guojian, Zhu Jianghong . New technique for the endoscopic removal of long foreign bodies. Rev Esp Enferm Dig 2023. doi: 10.17235/reed.2023.9398/2022.

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New technique for the endoscopic removal of long foreign bodies

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Funding: this work was financially supported by the grants from The Scientific Research Project of The Second Affiliated Hospital of Soochow University (SDFEYJBS2102).

Conflict of interest: the authors declare no conflict of interest.

Keywords: Long foreign bodies. Endoscopy. Technique. Digestive tract. Treatment.

Dear Editor,

Removing long foreign bodies (LFBs) is a challenge as the risk of perforation is high, especially in anatomically narrow or acute angulations areas (1). Herein, we report a new technique for removing LFBs using endoscopy.

The equipment includes a coil, a sleeve and a pick-up pocket. The coil comprises a coil head, a hot-melt junction and a pull ring. The coil head and the pull ring are connected into a hole through the hot-melt junction. The sleeve is placed over the coil, so that the coil can slide and shrink in it. The pick-up pocket is conical or cylindrical with an opening. The coil head is tightly glued with the outer edge of the opening of the pick-up pocket, so that the opening of the pick-up pocket is fixed on

the coil head (Fig. 1A and B). It can quickly and accurately capture LFBs in the patient's body cavity through the pick-up pocket. In the process of retraction and dragging, the pick-up pocket forms an isolation between LFBs and the patient's lumen, which can effectively separate the sharp edge of LFBs, without damaging the patient's lumen when taking it out. The pick-up pocket is conical or cylindrical, which is conducive to ensuring the straightness of LFBs and facilitating its passage through the cardia and throat.

During the process, when the coil head reaches the position of LFB, the coil head fixed with the pick-up pocket is pushed out of the sleeve by controlling the guidewire, and the retrieval pocket is used to capture the LFB. The captured LFB is pulled back by controlling the guidewire, then the pick-up pocket wrapping the LFB is fixed on the distal head of the sleeve, and withdrawn from the human body with the sleeve (Fig. 1C).

Reference

1. Aladin H, Than NN, Theron B, et al. Successful removal of multiple long foreign bodies: an unusual neck hyperextension technique. QJM 2017;110(5):329-30. DOI: 10.1093/qjmed/hcx018

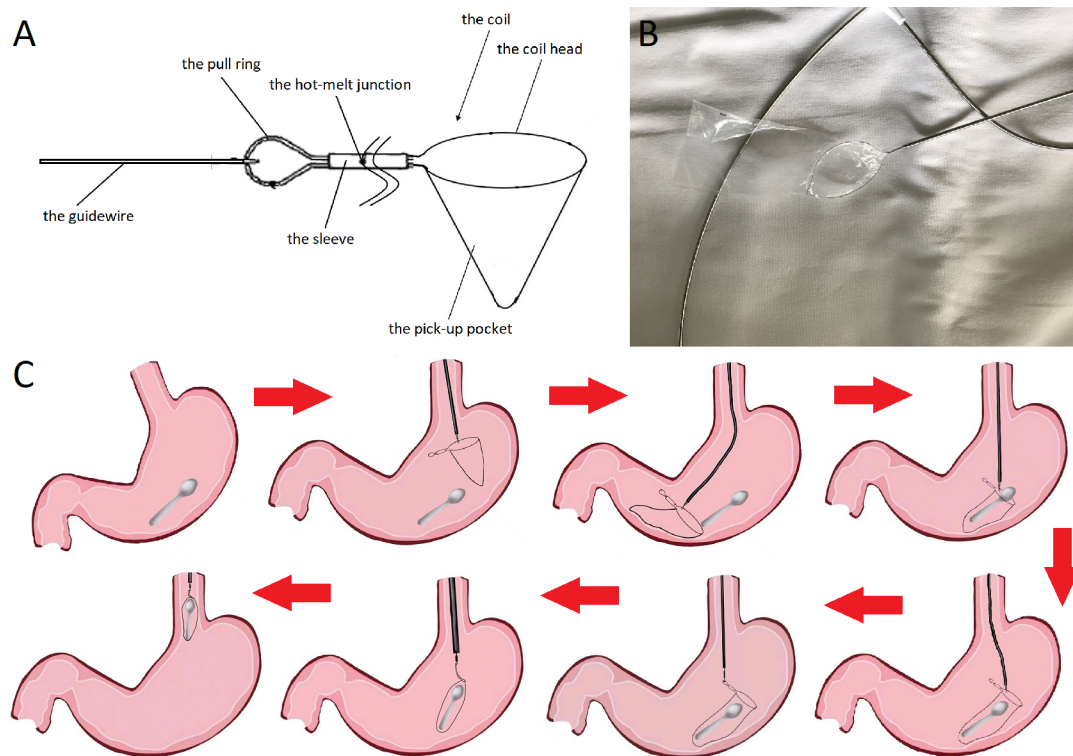


Fig. 1. A. The sketch map of the foreign body removal device. B. The gross appearance of the foreign body removal device. C. The schematic diagram of the long foreign body removal operation process.