Endoscopic Retrieval of a Large Gastric Foreign Body with a Home-Made Fishing Net

The retrieval of retained gastric foreign bodies can be a challenge for the endoscopist especially when the objects cannot be grasped due to their dimensions or shape with the normally available endoscopic devices. Since these cases usually require laparotomy, some sophisticated tools and techniques have been described to enhance the success of endoscopy, to avoid surgery and to appropriately deal with a wide variety of situations (1-4).

We removed a marble about 3 cm in diameter from the stomach of a 5-year-old child, which had been there for two weeks, with a home-made rubber fishing net. The device was built using a loopwire, designed for endoscopic polypectomy (Olympus SD-5U), and a condom (Ansell, USA) was used as the bag (Figure 1a). The rubber fishing net was secured by its thicker edge to the loopwire with separate stitches and trimmed to a convenient length. The two proximal stitches were fixed to both wires to prevent them from slipping and causing narrowing of the basket opening during various manoeuvres (Figure 1b). This basket was prepared on the open loopwire already inserted into the operating channel of the ready-to-use endoscope and placed in the patient's mouth. The marble was visualized, encircled by the loopwire against the gastric wall and captured with a rotating movement of the endoscope. Thereafter, the foreign body was easily retrieved enclosed in the bag. During withdrawal the loaded bag stretched, forcing the stitches to slip and narrow the loop, firmly entrapping the foreign body (Figure 1c). The entire procedure was carried out without complications.

The fishing net made of a resistant, thin and sterile material is an easy alternative method for endoscopic removal of foreign bodies and can help in reducing indications for surgery.

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Figure 1: a The endoscopic basket is made from a condom which is fixed to the loopwire by separate stitches; the loopwire is inserted into the operative channel of the fiberscope. The condom is appropriately trimmed to avoid redundant length obscuring the endoscopic view. b The proximal stitches are knotted on both sides of the wire to prevent the net from slipping off which would lead to narrowing of the basket opening during endoscopic manoeuvres. c The basket loaded with the foreign body stretches and forces the stitches to slide and narrow the opening of the basket.

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