Video Endoscopy: Removal of Retained Sewing Needles from the Duodenum

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Abstract We report an interesting case of a 21-year-old unmarried girl who swallowed six sewing needles. Her complaints were pain in the epigastrium, associated with nausea and vomiting. On examination, there was mild tenderness in the epigastrium. X-ray of the abdomen and endoscopy confirmed the presence of six needles in the duodenum, with tips lodged in the duodenal wall. Psychiatric opinion was sought which was normal. Under video endoscope (Pentax 2.8, EG 27708) guidance with Captura biopsy forceps without spikes (Cook DBF-2.4-160-S), six sewing needles were removed successfully from the duodenum through the endoscope channel without any complications. However, a video endoscopic removal of the retained six

needles from duodenum is probably being reported for the first time.

Keywords Sewing needles · Endoscopic forceps · Duodenum

Case Report

A 21-year-old unmarried female presented with a complaint of pain in the upper abdomen since 1 month. The pain was low grade continuous in nature, associated with nausea and vomiting. X-ray of the abdomen revealed six linear radio-opaque shadows in the epigastric region. Ryles tube was inserted and X-ray of the abdomen (lateral view) was taken, which revealed radio-opaque shadows at and around the tip of the Ryles tube. On performing endoscopy (Pentax 2.8, EG 27708), two needles were seen in the first part, two in the second part and another two in the third part of the duodenum. All the six needles were removed successfully by using Captura biopsy forceps without spikes (Cook DBF-2.4-160-S) through endoscopic channel (Figs. 1 and 2).

After endoscopy, her X-ray of the abdomen was found normal. On the third day, repeat endoscopy was performed, which was normal.

Discussion

There are different techniques involved to remove a sharp foreign body. One method involves using an overtube to protect the oesophagus during repeated insertion and withdrawal of the

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Fig. 1 Position of the needles

Fig. 2 Technique of endoscopic removal of the needles

endoscope [1–3]. Another technique involves fashioning a protective hood for the endoscope using a variety of devices such as soft latex protector hood [4, 5]. In the present case, we used video endoscope to remove the needles with the help of endoscopic forceps by picking the head of the needle and taking it inside the endoscopic channel. Video endoscopic removal of needle is fast, easy and provides better vision than fibre endoscope. We report video endoscopic removal of six sewing needles from duodenum. To our knowledge, there have been no similar cases reported till date.

Conclusion

Video endoscopic approaches to remove ingested foreign bodies are minimally invasive as compared with surgical intervention. However, extreme caution is required when the foreign body is sharp, as it can easily injure the wall of the gastrointestinal tract.

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References

1. Enjoji A, Nagata Y, Furuichi A, Kawakami S, Saiwai H, Furui J et al (2004) Successful removal from the duodenum of swallowed sewing needles using devised endoscopic forceps. *Endoscopy* 36 (2):193
2. Rogers BH, Kot C, Meiri S, Epstein M (1982) An overtube for the flexible fiberoptic esophagogastroduodenoscope. *Gastrointest Endosc* 28:256–257
3. Spurling TJ, Zaloga GP, Richter JE (1983) Fiberendoscopic removal of a gastric foreign body with overtube technique. *Gastrointest Endosc* 29:226–227
4. Bertoni G, Pacchione D, Conigliaro R, Sassatelli R, Pedrazzoli C, Bedogni G (1992) Endoscopic protector hood for safe removal of sharp-pointed gastroesophageal foreign bodies. *Surg Endosc* 6:255–258
5. Bertoni G, Sassatelli R, Conigliaro R, Bedogni G (1996) A simple latex protector hood for safe endoscopic removal of sharp-pointed gastroesophageal foreign bodies. *Gastrointest Endosc* 44:458–461