Management of severe chest pain caused by a Bravo pH monitoring capsule

Continuous ambulatory pH-metry with the Bravo "catheter-free" monitoring system (Medtronic, Minneapolis, Minnesota, USA) is becoming more and more popular [1–3]. As experience with this technique has grown, it has become evident that up to 50% of patients report mild chest pain [2–4] or even severe chest pain requiring endoscopic removal of the capsule [3,5]. We have also had three patients with in-supportably severe chest pain that occurred 2–3 hours after placement of a Bravo capsule. Because treatment with analgesics was ineffective we decided to remove the first capsule after 2 days. The pain ceased promptly. On the basis of our experience with this patient, we removed the capsules immediately after completion of 24 hours of recording in the other two patients.

We tried to remove the first capsule (Fig. 1) by exerting gentle pressure with the tip of the endoscope [5], grasping it with a biopsy forceps in an attempt to push it off the mucosa [3]. However, the capsule was attached too firmly and could not be dislodged. We eventually placed a polypectomy snare around the capsule (Fig. 2) and were able to detach it easily from the esophageal wall with electrocautery. The capsule was recovered using the same snare (Fig. 3), leaving only a small mucosal defect similar to that left after a small mucosectomy (Fig. 4). This procedure appears to be fairly safe because only mucosa and not the whole esophageal wall can be aspirated due to the small size of the vacuum well in the capsule (Fig. 5). Detaching the capsule with a polypectomy snare would therefore be very unlikely to cause an iatrogenic esophageal perforation. Furthermore, no bleeding will occur due to the electrocautery.

Endoscopic removal of the capsule with a polypectomy snare is a reasonable treatment strategy in the event of capsule-induced severe chest pain. This method seems safe and prevents bleeding from the mucosa.
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References


Bibliography

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