

Small-bowel migration: a possible complication of adjustable intragastric balloons

Endoscopic placement of an intragastric balloon in obese patients is a nonsurgical intervention that allows for effective weight loss, without excessive risk of complications [1,2]. Although in most published studies it is presented as effective and safe, it also has some limitations: it ceases to be effective after 2–3 months and there is an increased risk of serious complications over 6 months of implantation [3]. The recently introduced Spatz adjustable balloon system (ABS; Spatz FGIA, Inc., Jericho, New York, USA) is a dynamic bariatric therapy with a marked prolongation of the implantation time and a safety mechanism that precludes its distal migration into the duodenum despite balloon deflation [4]. We report the first case of complete deflation of the Spatz ABS, with duodenal migration of the entire device.

A 43-year-old man with grade I obesity (body mass index [BMI] 30.2 kg/m²) underwent ABS placement. After 5 months he began to experience short episodes of severe epigastric pain which were not related to food intake. The pain gradually increased in intensity and frequency, and was associated with emesis. Upper endoscopy revealed that the intragastric device had completely migrated into the duodenal bulb, occluding its lumen (● Fig. 1). The balloon was deflated, with a small tear in its wall. Furthermore, we found that one of the inserted ends of the stabilizer band had complete rupture, allowing free movement of the antimigration distal catheter (● Fig. 2). On the duodenal bulb there was an ulcer, caused by the impaction of the device (● Fig. 3). The band rupture and duodenal ulcer were observed after the extraction of the device.

The mechanism of rupture of the stabilizer band is not known. However, it is clear that after the deflation of the balloon following the tear, intestinal migration of the device was facilitated by the loss of this system. We believe that the rigidity of the antimigration system helped to avoid distal intestinal progression of the device, facilitating endoscopic removal.

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Competing interests: None

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Fig. 1 An intragastric device in a 43-year-old man with grade I obesity which completely deflated and migrated into the duodenal bulb, occluding the duodenal lumen.



Fig. 2 Complete rupture of one of the insertion ends of the stabilizer band.



Fig. 3 A chronic ulcer is seen on the duodenal bulb, caused by the impaction of the intragastric device.