Gastric outlet obstruction after the insertion of a fully filled intragastric balloon

Key words: Weight reduction, Obesity, Bariatric surgery. Intragastric balloon. Gastric outlet obstruction.

Dear Editor,

We report the case of a 68-years-old woman, who came to our emergency room because of continuous vomits and epigastric pain. She had undergone an Allergan® gastric balloon insertion two weeks before admission in another hospital, with an adequate balloon deployment. The patient reported abdominal pain, nausea and vomits for 48 hours before admission. Physical examination revealed epigastric abdominal tenderness, without peritoneal signs, in an otherwise obese patient.

Two days before admission she presented nausea and vomits with an increasing epigastric pain, which prevented her from having solid food or liquids by mouth. After admission, a plain X-ray abdominal film was taken, showing a significant gastric distension. Then, a nasogastric tube was inserted and a CT scan was performed. The CT (Fig. 1) showed the impacted balloon occluding the pylorus and causing gastric outlet obstruction despite the nasogastric tube.

The on-call endoscopist was consulted and decided, by mutual agreement with the patient, to retire the balloon endoscopically under general anesthesia. The procedure was performed with some difficulties related with the great amount of food persisting in the stomach. The balloon was successfully removed with a foreign body mouse-tooth forceps, after emptying it (500 ml of liquid were removed from inside the balloon) by means of a echoendoscopy needle (the specific kit was not available in our hospital). The patient had an uneventful recovery, being discharged 24 hours later.

Discussion

Intragastric balloon is an easily inserted device which can lead to a rapid weight loss to patients with an otherwise high surgical risk due to morbid obesity. Its use as a previous step prior to surgery is widely accepted, but it seems to be ineffective as a single method to reduce weight and its results are transient (1,2).

Although the intragastric balloon is relatively safe, there are significant risks and potential side effects derived from its insertion (2). Several reports have shown few severe but significant complications, sometimes in patients with a previous gastric surgical procedure (3,4) or with normal stomachs, occasionally related with its retrieval (5,6) or spontaneous perforation and subse-

Fig. 1. Coronal reconstruction of CT, showing the impacted balloon occluding the pylorus and causing gastric outlet obstruction despite the nasogastric tube.
quent deflation (1), producing intestinal obstruction (7,8). This complication that causes oral intolerance (leading to balloon removal), represents a very unusual situation, appearing at about 2.5 % (9) of all technically well inserted and deployed intragastric balloons, presenting with vomits and epigastric pain few days after its insertion.

Our first suspicion was a puncture and partial emptying of the balloon, but the CT scan showed an adequate diameter. Initially, we considered likely a spontaneous resolution of balloon impaction with the pressure reduction offered by a nasogastric tube, but after 24 hours the patient worsened and we asked her opinion and offered her the removal of the device, as described above.

Eduardo Redondo-Cerezo, Virgilio Martos-Ruiz, Ana Matas-Cobos, Manuel Ojeda-Hinojosa, Juan Gabriel Martínez-Cara, Antonio Damián Sánchez-Capilla, Mercedes López-de-Hierro-Ruiz and Javier de-Teresa

Unit of Digestive Endoscopy. Department of Digestive Diseases. Hospital Universitario Virgen de las Nieves. Granada, Spain

References