

## Cellulase, Coca-Cola<sup>®</sup>, pancreatin and ursodeoxycholic acid in the dissolution of gastric bezoars: why not all together?

Key words: Bezoars. Pancreatin. Omeprazole. Levosulpiride. Ursodeoxycholic acid. Gastric outlet obstruction.

Dear Editor,

A bezoar is a concretion of non-digested/digestible material usually formed in the stomach. There are several types that are classified according to their origin; the most common type is the phytobezoar (1), which is composed of vegetables and fruits. These situations are usually associated with an impaired gastric outlet, such as gastric surgeries or metabolic dysfunction as occurs in diabetes mellitus or hypothyroidism (2). It is a rare cause of intestinal obstruction and the treatment of choice in this context is surgery (1). In the non-obstructive scenario there are several feasible therapeutic techniques, such as endoscopic fragmentation and removal or the chemical dissolution by cellulose (3) or Coca-Cola<sup>®</sup> (Coca-Cola Co., Atlanta, Ga.) (4,5), which have been used individually in prior case reports with a high rate of success.

Recently, two cases with huge gastric phytobezoars have been resolved by chemical dissolution, using the following therapeutic mixture during four days (3): cellulase (magistral preparation, 300 mg capsules, one in the morning and another in the evening), pancreatin, ursodeoxycholic acid, omeprazole, levosulpiride and Coca-Cola<sup>®</sup> (two 33 cl-cans a day, which is a lower amount with respect to previous case reports). After four days of treatment, the patients had a successful outcome and both bezoars completely disappeared (Fig. 2).

A mixture of pharmacological treatments is an option to be considered in a non-emergency scenario, instead of individual therapies. This is a low cost alternative in relation to other techniques and is a non-invasive approach. Finally, nutritional counselling is crucial, not only after the acute episode but also after surgery and the first symptoms of a

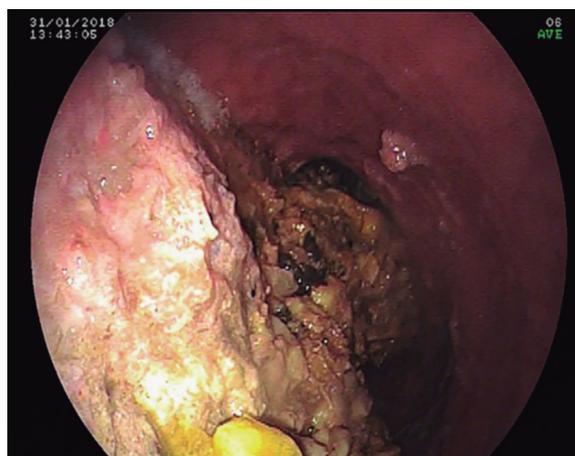


Fig. 1. A huge gastric bezoar.

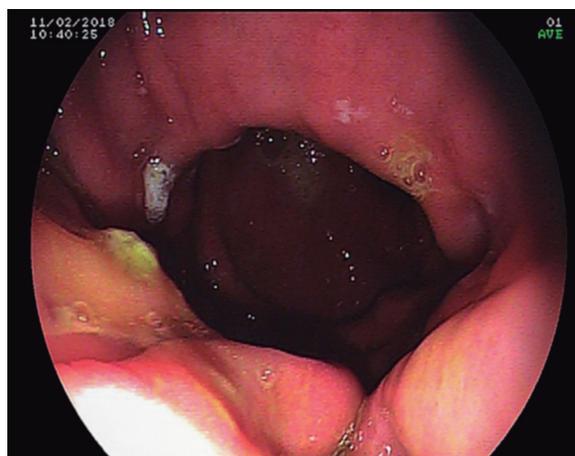


Fig. 2. The normal stomach after a complete chemical dissolution of the bezoar using the therapeutic mixture.

metabolic disorder. Orthopramides as prokinetics may also be added to the treatment.

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