

Title:

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Surgical treatment of buried bumper syndrome in patients with Parkinson's disease and duodenal levodopa/carbidopa infusion therapy

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Disclosures:

The authors deny any potential conflicts of interest.

Dear Editor:

We have read with interest the article by Garrido Durán C et al.⁽¹⁾, in which endoscopic aspects of duodenal levodopa/carbidopa therapy in the treatment of advanced Parkinson's disease are analyzed. In this article, buried bumper syndrome (BBS) is documented in 5.4% of cases. Normally, the initial treatment of BBS is

endoscopic therapy ^(1,2), although sometimes surgery may be necessary. For this reason, 4 cases of BBS treated with surgery are presented.

Case reports.

The characteristics of the patients with BBS are shown in table 1. BBS was diagnosed by endoscopy and computed tomography. Surgical treatment of BBS was indicated due to failure of endoscopic treatment. Surgery consisted of a spindle gastrotomy, including the granuloma/abscess of the gastric wall that contained the internal bolster of the gastrostomy tube. Subsequently, a transverse closure of the gastric wall defect was performed with a double 2-0 barbed suture or a mechanical suture, placing the new 15 F gastrostomy tube above the gastric suture, and a new tube of 9 F was inserted through the previous tube and was guided to the duodenum.

Discussion.

Once diagnosed, BBS should always be treated, even if it is asymptomatic, due to the continuous migration of the internal bolster and the risk of bleeding or perforation ⁽³⁾. Initially, treatment is usually endoscopic because it is less invasive, and several techniques ⁽²⁾ such as endoscopic incision with a needle knife ⁽¹⁾ or a hook knife ⁽⁴⁾ have been described. Surgery is reserved when endoscopic treatment fails ⁽²⁾, although generally, in cases of deep impaction or migration of the internal bolster into the abdominal wall, surgical intervention by laparotomy or laparoscopic approach is necessary ⁽³⁾.

References.

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Table 1. Characteristics of the patients with buried bumper syndrome.

Case reports	1	2	3	4
Age (years)	66	63	61	73
Gender	Male	Male	Male	Male
Evolution of Parkinson's disease (months)	253	115	199	105
Duodenal levodopa/carbidopa infusion therapy until the development of the buried bumper syndrome (months)	22	52	44	28
Number of previous duodenal tube replacements	0	1	1	1
Surgical approach	Laparoscopic	Open	Open	Open
Follow-up from the surgery (months)	35	18	11	1
Complications	No	No	No	No