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Letter to the Editor

HELLER-PINOTTI SURGERY TO TREAT THE HIPERTENSIVE LOWER ESOPHAGEAL SPHINCTER

Emprego da operação de heller-pinotti no tratamento do esfíncter esofagiano inferior hipertensivo

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INTRODUCTION

In the ethiological investigation of dysphagia, a mechanical obstruction in the esophageal tube of benign or a malign origin is almost always observed. However, a motor disorder must be considered in the absence of these findings. Hypertensive lower esophageal sphincter (HLES) is a type of motor disorder characterized by high pressure in the lower esophagus sphincter (LES) presenting a value higher than 45 mm Hg, associated to normal peristalsis. Patients with this disease refer dysphagia, sometimes together with thoracic pain[2,3]. HLES is rare once the incidence corresponds to 0.3 to 2.7% of all the patients arriving to the esophageal motility laboratories[3,11].

The authors had the opportunity to attend two patients. Considering the rarity of the disease, this publication aimed at reporting the clinical and therapeutical aspects and the results of the surgical treatment using the Heller-Pinotti's technique[12].

CASE REPORTS

CASE 1

A woman, 62 years old, white, referred dysphagia to solids, five years ago. No epidemiological antecedents to chagasic disease were reported and a negative sorology confirmed the affirmation. Physical examination presented no significant alteration. Esophagogram showed an esophagus with a normal diameter that was confirmed by the esophageal endoscopy. Esophageal manometry revealed LES with 82.2 mmHg, with a normal relaxation; upper esophagus sphincter (UES) with 40.6 mmHg; esophageal body with normal peristalsis.

The treatment was a cardiomyotomy associated to an anterior fundoplication (Heller-Pinotti' technique) performed by laparoscopy. Clinical evolution showed remission of dysphagia. A new manometry performed out three months after showed LES=28.9 mmHg, UES=53 mmHg and normal peristalsis.

CASE 2

A woman, 42 years old, white, presenting dysphagia complaint to solids six months ago and with 4 kg emaciation arrived to medical attendance with a physical examination without no alterations, normal esophagogram and endoscopy. Esophageal manometry revealed LES=48.5 mmHg, with normal relaxation; UES=75.5 mmHg, normal peristalsis. The treatment was similar to the one of the previous patient, however, performed by laparotomy (Figure 1). Follow-up showed restoration of normal deglutition. Manometry after the operation showed LES=22.8 mmHg, UES=81 mmHg and normal peristalsis.

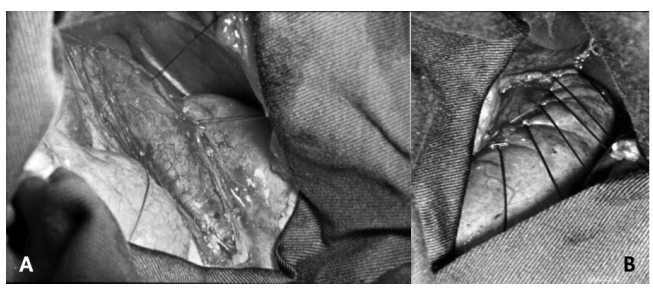

FIGURE 1 - Cardiomyotomy performed in the gastroesophageal transition: A) miotomy performed out showing wide and long exposition of esophagus gastric junction; B) anterior and partial fundoplication covering the cardiomyotomy.

DISCUSSION

Described by Code et al.[2], HLES is a rare esophageal motor disorder, where the inactivity pressure of LES exceeds three standard deviations higher than the upper limit of normality. In the common manometric studies, pressure is higher than 45 mmHg[6]. Other manometric characteristics include preserved relaxation of the esophagus and normal peristalsis. HLES is clinically associated to dysphagia and thoracical pain.

According to Spechler and Castell[13] classification of esophageal motor disorders, HLES together with nutcracker esophagus constitute the hyperkinetic disorders group. Patients are usually women, as in our cases and as well as in the literature[6,7,15].

Therapeutical options are limited (Table 1) and, aim at reducing the pressure in LES. Bortolotti et al.[1] applied Sildefanil (50 mg) to patients with retro-sternal pain and/or dysphagia and observed a diminution of esophageal pressure, but they did not refer clinical remission. The authors proposed the use of this medicament for the HLES treatment. Considering the blockers of calcium channels, nifedipine was suggested as a good therapeutical option; it promotes the symptoms remission, pressure reduction in LES and has no collateral effects. Some authors recommended a botulinum toxin injection through endoscopy[10]. The results differ, once Jones[6] reported complete remission of dysphagia, and Lacy et al.[7] verified premature remission of symptom. Besides the botulinum toxin injection, cardia dilatation is another procedure that can be performed by endoscopy. It was used with success by Traube et al.[15].

TABLE 1 - Hypertensive lower esophageal sphincter: therapeutical options

Reference	Casuistry	Treatment
Jones, 1996[6]	1	Botulinum toxin
Lacy et al., 2002[7]	1	Botulinum toxin
Bortoletti et al., 2002[1]	14	Sildenafil
Nasrallah et al., 1985[9]	10	Nifedipine
Traube et al., 1986[15]	1	Pneumatic dilatation
Patti et al., 2005[11]	2	Miotomy + partial fundoplication
Tambankar et al., 2003[12]	4	Miotomy + partial fundoplication

Recently, some authors indicated surgical treatment, with a partial cardiomyotomy and a antireflux valve[11,14]. Considering the efficiency of Heller-Pinotti's operation in the treatment of mega-esophagus and their accuracy to reduce LES pressure, the authors of the present paper believe valid their procedure for the treatment of the two reported patients. After the postoperative evaluation (80 days and 33 months), both patients referred dysphagia remission and weight gain.

CONCLUSION

The authors concluded that the Heller-Pinotti's operation is an effective good therapeutic option for HLES patients.

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