Letters to the Editor

Treatment of achalasia with botulinum toxin injection guided by endoscopic ultrasonography in a patient with esophageal varices

Key words: Esophageal achalasia. Botulinum toxin. Endoscopic ultrasound.

Dear Editor,

Achalasia is characterized by incomplete lower esophageal sphincter (LES) relaxation and aperistalsis of the esophagus. It is manifested by regurgitation, dysphagia and weight loss. Treatment options include addition of pharmacotherapy, endoscopic dilatation, botulinum toxin injection (BTI) and surgical myotomy. The presence of esophageal varices makes endoscopic treatment difficult and therefore increases the risk of complications. Endoscopic ultrasonography (EUS) allows identification of esophageal varices while providing security in the therapeutic intervention (1). We present a patient with esophageal varices and achalasia in which it was treated with EUS-guided ITB.

Case report

A 62 year old male with a 4-month history of dysphagia to solids and weight loss of 10 kg. The patient suffered from ethylic liver cirrhosis stage Child-Pugh B8. Underwent gastroscopy, which showed dilatation and atony of the esophageal body, with three medium-sized varicose cords in the lower third. A barium esophagogram showed esophageal dilatation with distal tapering. Manometry found no esophageal body peristalsis. A

thoraco-abdominal CT scan ruled out the existence of regional neoplasia. A score of six was obtained on a dysphagia out of a possible nine points (2). With the diagnosis of achalasia and after evaluating different treatment options we decided to perform EUS-guided ITB. Using A Pentax EG-3830UT endoscope was located LES and thickened hypoechoic area (7 mm) in continuity with the muscularis propria of the esophageal wall. That area was injected by 22-gauge endoscope EchoTip Ultra (Cook Medical) needle, a botulinum toxin mL (20 IU) (Botox, Inc., Irvine, Calif.) diluted to 1/5 per quadrant avoiding injection intravariz. There were no complications and the patient tolerated solid diet within 72 hours. A 9-month period of dysphagia saw the patient referred only occasionally, scoring one out of nine in a score of dysphagia.

Discussion

BTI in the LES is effective in improving symptoms in 90% of patients with achalasia. However only two thirds of patients maintained response at 6 months. It is particularly prominent in patients but not candidates of pneumatic dilation or surgical myotomy. Moreover, the treatment of achalasia in patients with esophageal varices increases the risk of possible complications from ruptured varices or underlying coagulopathy. This two diagnosis together is an extremely rare event. We found six reported cases of which only three underwent treatment, of which two resulted in surgery (3,4). A third patient was treated with BTI and subsequent to its failure, transjugular intrahepatic portosystemic shunt for portal decompression before pneumatic dilation was performed (5). The BTI in EUS-guided LES was described by Hoffman in 1997. In our patient both the location of the LES and avoidance of collateral circulation were allowed. Our case suggests, therefore, that coexisting achalasia and esophageal varices by endoscopic ultrasonography ITB can be considered as a safe and effective therapeutic option.

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