



○ CASO CLÍNICO

Dieulafoy's lesion in a diverticulum in third duodenum portion: a rare cause of massive bleeding

Lesión de Dieulafoy en un divertículo en la tercera porción del duodeno: una causa rara de hemorragia gastrointestinal masiva

Gustavo López-Arce,¹ Yanet Mayanin Uitz-Toala²

Abstract

Dieulafoy's lesion (DL) is a rare cause of gastrointestinal bleeding, DL is defined as abnormal arterial vessel without mucosal defect and the most frequent location is the lesser stomach curvature but could be present in any part of gastrointestinal tract. Endoscopic treatment modalities are adrenaline injection, bipolar electrocoagulation, rubber band and hemocliping. We present the case of 39-years-old female without comorbidities with massive gastrointestinal bleeding. Initial upper endoscopy revealed only a few antrum erosions, 24 hours later recurrent episode of massive gastrointestinal bleeding was noted, a new upper endoscopy was irrelevant thus, we realize an anterograde push enteroscopy and found a diverticulum in third portion of duodenum with visible vessel it was treated with combined endoscopic therapy (adrenaline injection, bipolar electrocoagulation and hemocliping). At follow up of 60 days, patient is asymptomatic and there is no bleeding recurrence. There is no consensus about management of DL, some studies suggest that combined therapy are better than monotherapy.

○ Resumen

La lesión de Dieulafoy es una causa rara de hemorragia gastrointestinal, consiste en un vaso arterial con defecto de la mucosa menor a 2 mm, el sitio más frecuente es en la curvatura menor del estómago, aunque puede presentarse en cualquier parte del tracto digestivo. El tratamiento endoscópico puede consistir en inyección de adrenalina, electrocoagulación con sonda bipolar, aplicación de ligadura y hemoclips.

Presentamos el caso de una paciente de 39 años de edad, que ingresa a urgencias por hematemesis y hematoquezia masivas, y choque hipovolémico asociado. Se realizó una primera endoscopia superior, en la cual se detectaron erosiones aisladas en antro sin hemorragia activa, fue ingresada a observación y a las 24 horas presentó recurrencia de hematemesis y hematoquezia nuevamente con choque hipovolémico, por lo que se realizó nueva endoscopia superior sin hallazgos relevantes, se decidió llevar a cabo una enteroscopia anterógrada de empuje, en la que se encontró un divertículo en la tercera porción del duodeno con una vaso visible y un coágulo adherido, aplicamos terapia endoscópica combinada (inyección de adrenalina 1:10 000, electrocoagulación con sonda bipolar y aplicación de hemoclips). En el seguimiento a 60 días, no se observó

¹ Gastroenterology and Endoscopy Department of Hospital Ángeles Acoxpa, Mexico City, Mexico

² Internal Medicine Department of Hospital Angeles Lindavista, Mexico City, Mexico

Corresponding author: Gustavo López Arce. Calz. Acoxpa 430, Int. 120, Col. Ex-Hacienda Coapa, Del. Tlalpan, C.P. 14308, Mexico City, Mexico.
E-mail: glopezarce@gmail.com

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recurrencia de hemorragia y la paciente permanece asintomática.

No existe consenso respecto al tratamiento de la lesión de Dieulafoy, sin embargo se ha observado en algunos estudios que la terapia endoscópica combinada ofrece mejores resultados.

Palabras claves: Hemorragia gastrointestinal masiva, lesión de Dieulafoy, divertículo, hemorragia, duodeno, México.

Introduction

Dieulafoy's lesion (DL) is a rare case of gastrointestinal bleeding, most frequent sites of localization are in the lesser curvature of stomach within the first 6 cm proximal to gastrointestinal junction, but could be present in any part of gastrointestinal tract.¹ DL is an arterial vessel without mucosal defect, etiology of this lesion is not known; some case reports are more frequent in adult male.²⁻⁴ Hematemesis and hematoquezia occurs as massive bleeding. Diagnosis could be difficult, a mean of two procedures (range 1-6) are required to diagnose.⁵ Different treatment modalities are endoscopic, interventional radiology and surgery. Endoscopic modalities are adrenaline injection, rubber band ligation, electrocoagulation and clipping.⁶

Case presentation

A 39-years-old woman was admitted in emergency room because hematemesis and rectorrhagia at the same time six hours ago, patient referred syncope and symptoms of low cardiac output. She denied chronic co-morbidities and reported ingestion of non-steroidal anti-inflammatory drugs frequently because headache. At admission her haemoglobin was 9 g/dL, hepatic serum enzymes, coagulation blood test and serum creatinine was normal. Initial upper endoscopic evaluation revealed only a few erosions in antrum and non-active bleeding or another abnormality was encountered. Intrahospitalary observation and high dose of proton pump inhibitors were administered; 24 hours later she presented a new episode of massive bleeding manifested as hematemesis, rectal massive fresh blood, hypovolemic shock and syncope. A new upper endoscopy were performed

and non significant abnormalities were noted (**video 1**), push upper enteroscopy revealed a diverticulum in the third portion of duodenum with clot inside, after remove of clot, 5 cc of adrenaline (1:10 000) was injected in four quadrant and a large vessel was noted, bipolar electrocoagulation and hemoclip were applied (**video 2**). Patient non-presented new episodes of gastrointestinal bleeding and discharged 48 hours later, at 60 days of follow up she is asymptomatic and denied new gastrointestinal bleeding episode.

Discussion

DL are rare, causes gastrointestinal bleeding from 0.09% to 4%.^{1-3,5} Few similar cases of gastrointestinal bleeding were reported in literature.^{7,8} Bleeding could be massive and life treating. In the present case, diagnosis was difficult because conventional upper endoscopy non-revealed any abnormality and push enteroscopy was necessary to establish diagnosis. In this case, we applied a triple combination therapy for DL (adrenaline injection, bipolar electrocoagulation and hemoclip application), electrocoagulation is safe modality but could result in intestinal perforation particularly in areas where bowel wall is thin,^{9,10} for this reason we decided to apply only a few seconds it allows to manipulate safely. There is no consensus about the better modality treatment for DL, but some paper suggests that combination therapy is better than monotherapy and prevents rebleeding.^{5,11}

Conflict of interest

The authors declare no conflict of interest.

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None.



○ **Video 1.** Inicial upper endoscopy.



○ **Video 2.** Push antero grade enteroscopy.



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