



Use of Over-the-Scope Clip as First Choice to Treat Gastric Dieulafoy Lesions

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ABSTRACT

Dieulafoy lesion is a rarely seen, superficial vascular lesion of the gastric mucosa that can lead to severe and recurrent bleeding which can be life-threatening. It is characterized by massive hemorrhages that can occur as a result of protrusion of a large artery from a submucosal defect. Endoscopic injection and mechanical and thermal methods are frequently used in traditional treatment. Herein, we presented a 61-year-old woman who was admitted with upper gastrointestinal hemorrhage owing to Dieulafoy lesion who was successfully treated with over-the-scope clip as the first choice of treatment.

KEYWORDS:

Dieulafoy lesion, Upper gastrointestinal hemorrhage, Over-the-scope clip

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INTRODUCTION

Dieulafoy lesion was first described by Gallard in 1884. It was named after Georges Dieulafoy in 1898, and is a rare but very important cause of gastrointestinal hemorrhage. It may be fatal if not treated promptly.^{1,2} This lesion, which is frequently observed on the lesser curve of the stomach, is responsible for 0.3-6.7% of upper gastrointestinal hemorrhages.³ It is more frequent in middle and older ages and more common in men. Endoscopic methods took place of surgery for treatment because of a high success rate.⁴ Nevertheless, bleeding after successful hemostasis with endoscopic intervention may be frequent in 6-28% of cases.⁵ We presented a case successfully treated with over-the-scope clip (OTSC) unlike conventional endoscopic interventional procedures.

CASE REPORT

A 61-year-old woman referred to the emergency ward with hematemesis. She did not have a similar complaint before. She had no chronic disease other than hypothyroidism. Laboratory data showed hemoglobin 9 g/dl and hematocrit 28.7%. Esophagoduodenoscopy showed a Dieulafoy lesion on the posterior wall of the prepyloric antrum (figure 1). An

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Fig.1: Dieulafoy lesion was observed in the posterior wall of the prepyloric antrum. 25x22 mm (300 x 300 DPI)

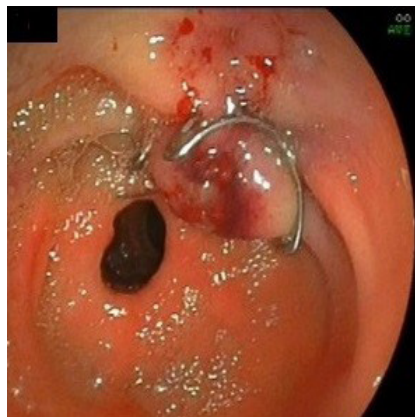


Fig.2: The 12mm diameter over-the-scope clip was successfully applied to the lesion. 25x22 mm (300 x 300 DPI)

OTSC (Ovesco Endoscopy, Tübingen, Germany) of 12 mm diameter was successfully applied to the lesion. After the procedure, bleeding was not observed in the lesion area (figure 2). The patient was discharged three days after the procedure and no re-bleeding was observed during the two-year follow-up. Written informed consent has been obtained from the patient for publication of this case report.

DISCUSSION

Dieulafoy lesion can be life threatening by causing submucosal vascular enlargement in the gastrointestinal tract and cause massive bleeding resulting in tearing. It is a rare lesion and it can be found in the entire gastrointestinal tract but it is most commonly seen in the stomach. There is no consensus on the cure of Dieulafoy lesion. The method of treatment is chosen according to the location of the lesion, accessibility, and experience. Conventional endoscopic methods such as injection (adrenaline, pure alcohol, sclerotherapy), thermal (heater probe, bipolar probe, argon plasma coagulation) or mechanical (banding, hemoclip) are often effective but may sometimes be unsuccessful. In the past, when repeated endoscopic therapy failed to achieve hemostasis, treatment options were limited to invasive procedures such as angiographically selective arterial embolization or surgery. Currently, less invasive techniques such as OTSC are considered for replacing the endoscopic method. Although OTSC was initially used for the closure of small wall defects in the gastrointestinal tract, it is currently used in various gas-

trointestinal hemorrhages. Skinner and colleagues used OTSC for endoscopic hemostasis in 12 patients with acute upper gastrointestinal hemorrhage, two of which had Dieulafoy lesion where conventional endoscopic methods failed. Hemostasis was obtained in all patients.⁶ Kratt and co-workers achieved a 94.2% success rate with OTSC in 60 patients with gastrointestinal bleeding of various causes, including Dieulafoy lesion.⁷ In addition, two separate cases of Dieulafoy lesions have been reported in the literature that OTSC was successfully applied to.^{8,9}

CONCLUSION

These results support that OTSC is an efficient endoscopic treatment method for hemorrhaging caused by Dieulafoy lesions.

ETHICAL APPROVAL

There is nothing to be declared.

CONFLICT OF INTEREST

The authors declare no conflict of interest related to this work.

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