

## MANAGEMENT OF DIEULAFOY'S LESIONS WITH ENDOSCOPIC MECHANICAL TECHNIQUE

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### Introduction

**Dieulafoy's lesion (DL)** is said to be a rare pathology. Even so, it is an important potentially fatal source of gastrointestinal bleedings (GIB), accounting for up to **5%** of acute nonvariceal GIBs and mortality of bleeding - **9%-13%**. So, it is necessary to include this pathology in the differentiated pathology of obscure GIB [1].

**DL** is characterized by the presence of an abnormally large dilated vessels that fail to decrease in size while emerging from the submucosa to the mucosal surface within the gastrointestinal wall or respiratory tract [2, 3].

**About 75%** of lesions are located in the stomach. However, lesions can also occur in the esophagus, duodenum, jejunum, ileum, colorectum, and even bronchus [4, 5, 6]. So, depending upon the location of the lesion, it may cause upper, middle or lower GIB. Obviously, even today **DL** is considered a **challenging diagnosis** [7].

Being a rare pathology, bleeding often requiring rapid diagnosis and treatment that may vary depending on lesion locations, there is no universal consent about the diagnosis and treatment approach (clips, sclerotherapy, argon plasma coagulation, thermocoagulation, or electrocoagulation)[6].

### Keywords

Dieulafoy's lesion, Endoscopic hemostasis, Mechanical hemostatic techniques, Endoscopic band ligation, Endoscopic hemoclippping.

### Purpose

To offer an overview of current data on available endoscopic techniques used for patients with GI bleeding resulting from DL.

### References

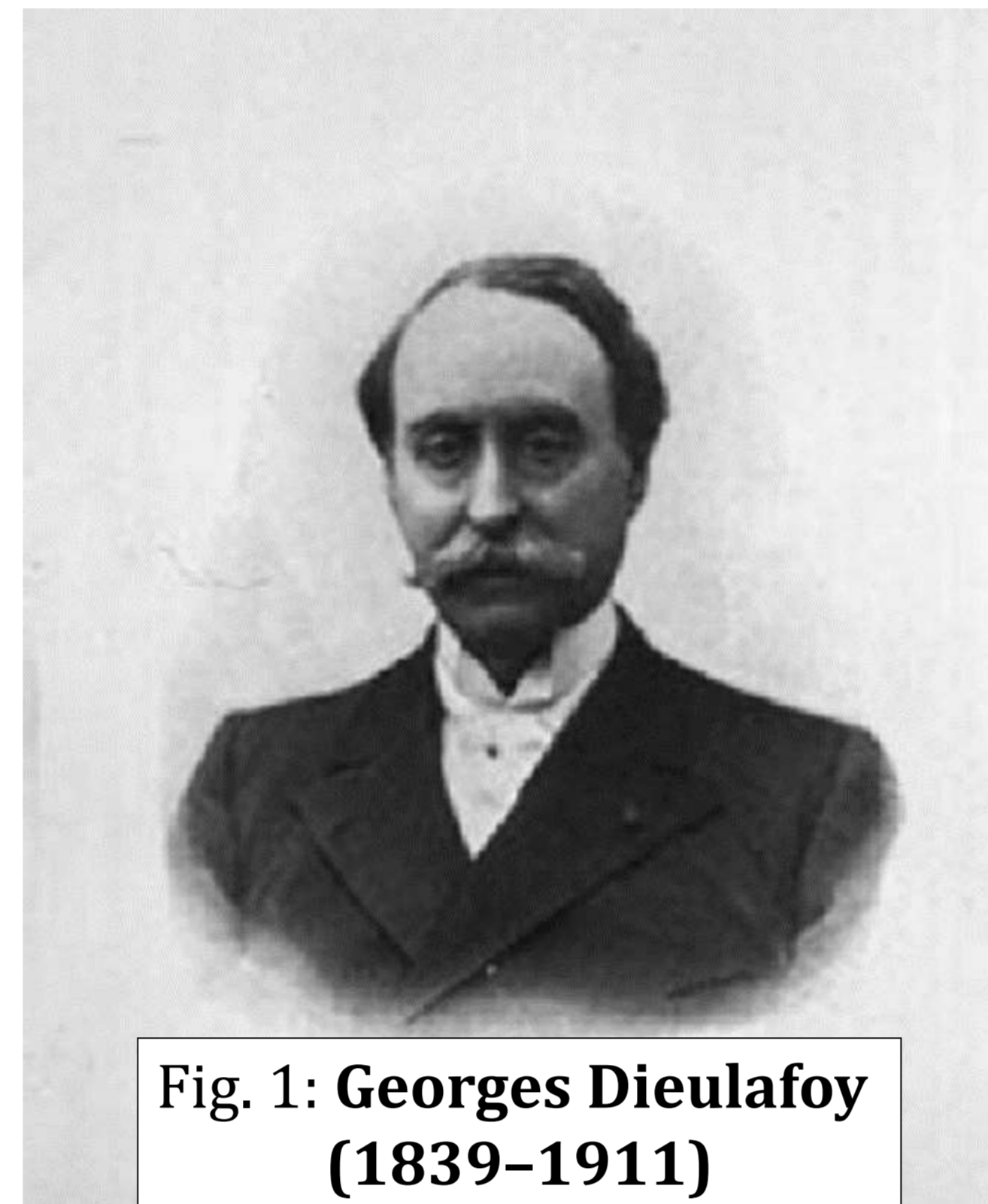


Fig. 1: Georges Dieulafoy (1839-1911)

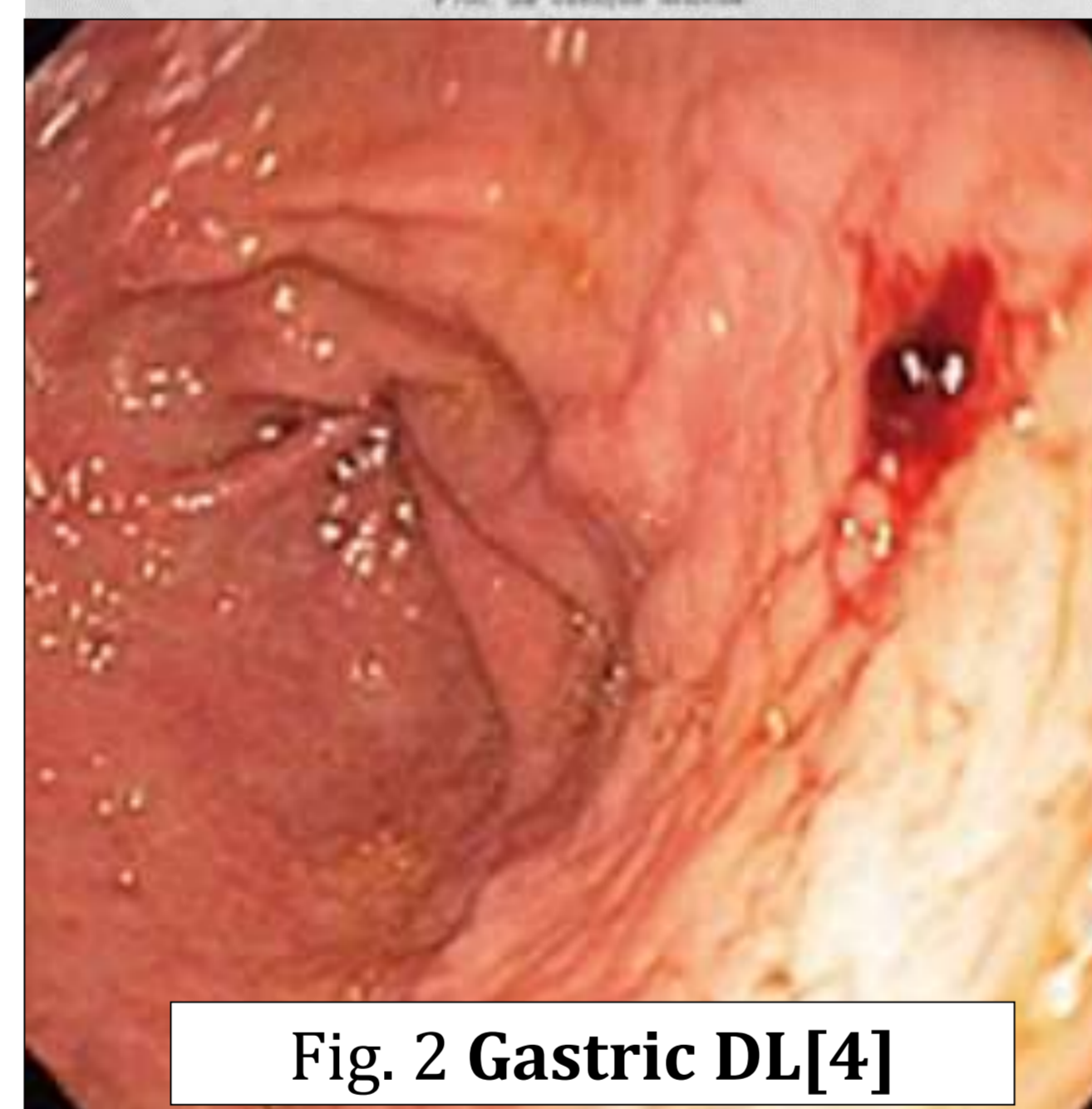


Fig. 2 Gastric DL[4]



Fig. 3 Rectal DL[2]

### Material and methods

The articles published during the years 2015-2020 from the PubMed database were selected according to the following keywords: “Dieulafoy's lesion”, “Endoscopic hemostasis”, “Mechanical hemostatic techniques”, “Endoscopic band ligation”, “Endoscopic hemoclippping”.

### Results

Each endoscopic method has both advantages and disadvantages, however, mechanical therapies including endoscopic **hemostatic clipping (EHC)** and **band ligation (EBL)** are considered to be the first option in the bleeding control with a success rate of about **90%** [8]. Studies also show that patients treated with EHC and EBL have **lower potential of recurrent bleeding with a lower mortality rate and excellent long-term results**.

However, there have been **few studies comparing the efficacy of different mechanical methods** in treating DL.

Several years ago, a **meta-analysis** of clinical trials examining this issue demonstrated that **there is NO clear benefit and NO differences in clinical outcomes between the EHC group vs EBL group** [2]. However, due to a shorter procedure time, EBL is recommended as initial hemostatic method [9].

### Conclusions

Mechanical hemostatic therapy demonstrated good clinical outcomes compared with other endoscopic techniques and is recommended as effective option in patients with DL.

Searching period: 2005-2020

“Dieulafoy's lesion”  
“Endoscopic hemostasis”  
“Mechanical hemostatic techniques”  
“Endoscopic band ligation”  
“Endoscopic hemoclippping”

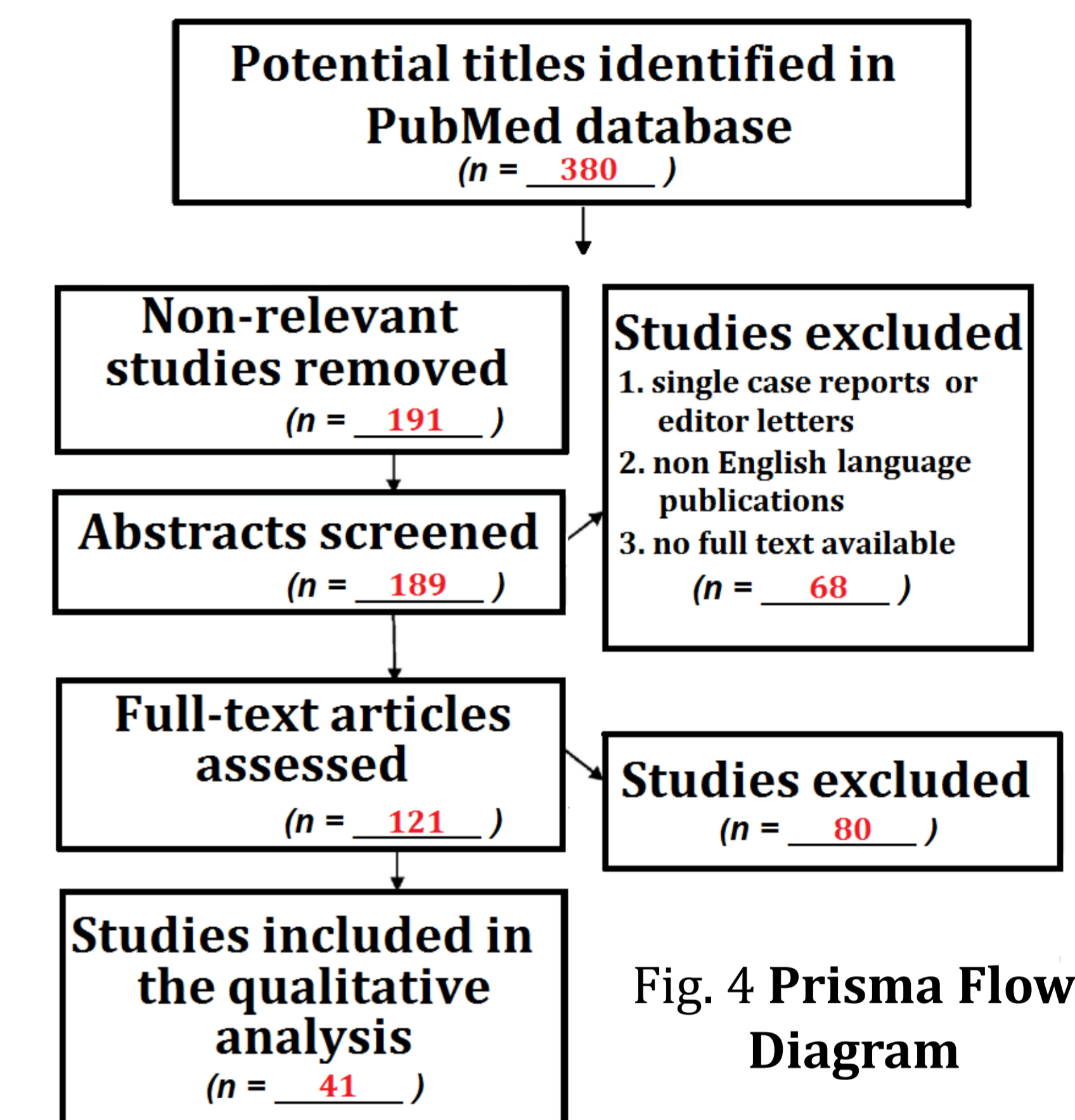


Fig. 4 Prisma Flow Diagram



Fig. 5 Hemostatic clipping of gastric DL [10]

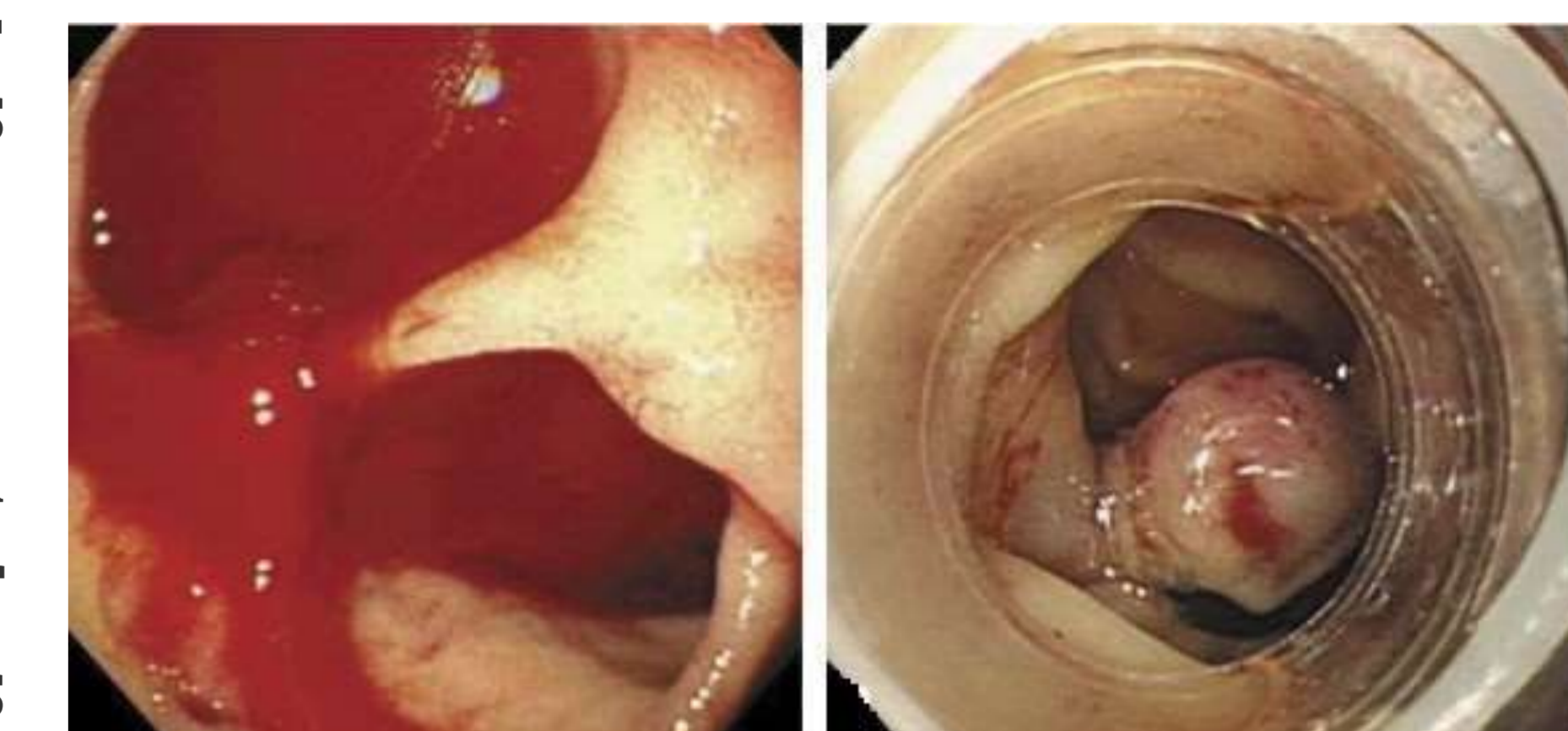


Fig. 6 Band ligation of DL [9]

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