





www.elsevier.pt/ge

#### **REVIEW ARTICLE**

# The Role of Emergency Endoscopy in Small Bowel Bleeding: A Review



## Enrique Pérez-Cuadrado-Robles\*, Enrique Pérez-Cuadrado-Martínez

Small Bowel Unit, Gastroenterology Department, Morales Meseguer Hospital, Murcia, Spain

Received 14 August 2015; accepted 9 November 2015 Available online 18 December 2015

#### **KEYWORDS**

Endoscopy, Gastrointestinal; Gastrointestinal, Haemorrhage; Intestine, Small **Abstract** There is no consensus on the timing and management of emergency overt obscure gastrointestinal bleeding. Emergency capsule endoscopy and balloon-assisted enteroscopy have a high diagnostic and therapeutic yield in these situations. Most lesions detected by small bowel endoscopy are amenable to endoscopic haemostasis, although some lesions still require surgery or interventional radiology. The management of these patients is varied, and doubt persists about which technique should be preferred as first-line treatment. This narrative review analyses the usefulness and impact of small bowel endoscopic techniques in the emergency setting for severe overt obscure gastrointestinal bleeding.

© 2015 Sociedade Portuguesa de Gastrenterologia. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### **PALAVRAS-CHAVE**

Endoscopia Gastrointestinal; Hemorragia Gastrointestinal; Intestino Delgado

### O Papel da Endoscopia de Urgência na Abordagem da Hemorragia do Intestino Delgado: Revisão

Resumo Não existe consenso sobre a melhor estratégia e respetivos tempos na abordagem urgente da hemorragia digestiva obscura manifesta. A cápsula endoscópica e a enteroscopia assistida por balão de urgência têm elevada rentabilidade diagnóstica e terapêutica nesta indicação. A maioria das lesões detetadas na endoscopia do intestino delgado são passíveis de hemostase endoscópica, apesar de algumas ainda necessitarem de tratamento cirúrgico ou de técnicas de radiologia de intervenção. A abordagem destes pacientes é variada e

E-mail address: kikemurcia@gmail.com (E. Pérez-Cuadrado-Robles).

<sup>\*</sup> Corresponding author.

persistem dúvidas sobre qual deverá ser a técnica de primeira linha. Este artigo de revisão analisa a utilidade e o impacto das técnicas endoscópicas do intestino delgado em contexto urgente na abordagem da hemorragia digestiva obscura manifesta severa.

© 2015 Sociedade Portuguesa de Gastrenterologia. Publicado por Elsevier España, S.L.U. Este é um artigo Open Access sob a licença de CC BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/4.0/).

#### 1. Introduction

The small bowel (SB) is unreachable by conventional flexible endoscopy, except for the duodenum and terminal ileum by upper endoscopy and colonoscopy, respectively. Emergency clinical situations that may require SB endoscopy mainly arise from acute SB bleeding, but other possible indications include foreign body removal or SB stenosis, which is manageable with balloon dilation or stent placement.

SB bleeding originating between the papilla and the ileocaecal valve is referred to as mid-gastrointestinal bleeding (MGIB). This concept overlaps with obscure-gastrointestinal bleeding (OGIB) of unknown origin. OGIB is categorized in occult-OGIB, defined by recurrent iron-deficiency anaemia and/or recurrent positive faecal blood tests; overt-OGIB (OOGIB) is defined by a persistent or recurrent exteriorization of melena or haematochezia after negative upper endoscopy, colonoscopy and other radiological examinations. The proportion of overt and occult forms varies in the different series to date but the most common presentation is occult-OGIB. However, emergency procedures in on-going OOGIB are rare, accounting for 1.79%-28.3%<sup>1-4</sup> of all patients reported. Most studies to date concerning emergency SB endoscopy have been retrospective series with a small number of patients and a few prospective randomized controlled trials. In addition, the concept of "emergency OGIB" is not consistent among different authors.

The emergence of two recent techniques – capsule endoscopy (CE) and device-assisted enteroscopy (DAE), fundamentally balloon-assisted enteroscopy (BAE) – have enabled us to study the source of MGIB, improving the management of SB diseases.

CE is recognized to have a role as a first-line procedure in non-massive OGIB patients, guiding the insertion route for further endoscopic approaches by BAE when needed, such as for biopsy sampling or therapeutic procedures. BAE, by oral and/or anal routes, may be guided by CE as well as by radiological techniques. BAE can be performed using two systems: double or single balloon enteroscopy (DBE, SBE). The length of the working channel is similar, approximately 2000 mm, but the channel diameter and insertion technique differ according to the type of enteroscope.<sup>5</sup> Thus, the choice of an enteroscope should be based on the location and nature of the lesion and its availability. For example, a big channel enteroscope (with 3.2 mm diameter) (double balloon enteroscope EN 580T, Fuji Film, Japan) may be required to allow a greater amount of aspiration volume (blood, air, CO<sub>2</sub>) and to pass accessories such as clips through more easily. Although a diagnostic enteroscope with a 2.2 mm channel (double balloon enteroscope EN 450P5, Fuji Film, Japan), could provide greater insertion depth if adhesions are encountered, it is limited by its channel, which does not allow passage of clips or conventional argon proves and injection needles (1.8 mm diameter accessories are required). These accessories sometimes are difficult to pass until reaching the SB lumen. Using a double balloon colonoscope (EN 450 P5, Fuji Film, Japan) by the oral route can be a good choice if lesions are in the proximal jejunum because it has an acceptable channel (2.8 mm diameter) with a shorter length (1520 mm), which allows the passage of conventional accessories more easily. The therapeutic enteroscopes 2.8 mm and 2000 mm in length are, however, the standard instruments (single balloon enteroscope SIF Q180, Olympus, Japan and double balloon enteroscope EN 450 T5, Fuji Film, Japan).

Although there is a well-established management algorithm in OGIB patients, there is no consensus on the timing of emergency endoscopy procedures in severe acute cases. Emergency management of patients with OOGIB is particularly challenging. Furthermore, patients presenting with acute OOGIB require a specific decision making strategy to perform an emergency endoscopic technique, surgery or interventional radiology. This decision may be difficult and is mainly based on the local experience and resources but also on the availability of skilled endoscopists at the moment of presentation as well as individual patient characteristics. In this sense, local emergency protocols may be crucial to quickly identify these selected patients and choose the best approach in each case. Specific healthcare circuits in small bowel endoscopy units experience challenges in terms of staff and endoscopic resources when quick management of these patients is necessary.

BAE not preceded by CE or angiography have been proposed as first-line procedures for those patients who present with massive bleeding. The oral insertion route is generally preferable when flexible enteroscopy is elected. <sup>6,7</sup> However, other studies have reported that emergency CE is a feasible technique that may have higher diagnosis yields than angiography. <sup>8</sup> The European Society of Gastrointestinal Endoscopy (ESGE) suggests that emergency CE and DAE should be considered equally in these patients. <sup>9</sup> In addition, emergency CE has been reported to be a useful procedure in patients with severe acute GI bleeding after negative upper endoscopy without a previous colonoscopy. <sup>10</sup>

The goal of this review is to assess the usefulness of SB endoscopic techniques in the emergency setting of acute OGIB.

#### 2. Concepts

There is no consensus regarding timing in emergency SB procedures for OGIB. Emergency DAE has been defined by

# Download English Version:

# https://daneshyari.com/en/article/3311243

Download Persian Version:

https://daneshyari.com/article/3311243

<u>Daneshyari.com</u>