Bleeding peptic ulcers resistant to endoscopic treatment: Calling for a surgeon or an interventional radiologist?

Romaric Loffroy

The Johns Hopkins Hospital, Division of Vascular and Interventional Radiology, The Russell H. Morgan Department of Radiology and Radiological Science, Baltimore, MD 21287, USA

Correspondance:
Romaric Loffroy, The Johns Hopkins Hospital, Division of Vascular and Interventional Radiology, The Russell H. Morgan Department of Radiology and Radiological Science, 600 North Wolfe Street, Blalock 545, Baltimore, MD 21287, USA. romaric.loffroy@gmail.com

Available online: 29 October 2010

Acute bleeding is the most common complication of peptic ulcer disease and about half the cases of upper gastrointestinal bleeding (UGI) are caused by gastric and duodenal ulcers [1]. First-line endoscopy achieves bleeding control in as many as 98% of patients [2]. Despite these measures, the mortality rate in patients with bleeding peptic ulcers remains as high as 5 to 10% [1] due to a combination of advanced age, multiple co-morbidities, and high transfusion requirements. Current treatment algorithms for massive UGI bleeding recommend aggressive correction of coagulation disorders followed by endoscopy [2]. Endoscopic therapy with epinephrine injection and heat probe coagulation is the most reliable method. Rebleeding is usually managed with a second endoscopic attempt. Severe bleeding despite conservative medical treatment or endoscopic intervention occurs in 5 to 10% of patients [2] and requires surgery or transcatheter arterial embolization (TAE). In selected patients judged to belong to the high-risk group (ulcers 2 cm or greater in size located at the lesser curve and posterior bulbar duodenal, shock on presentation, and elderly with comorbid illnesses), a more aggressive postendoscopy management is warranted. The optimal course of action is unclear. Most would be expectant and offer medical therapy in the form of acid suppression. The role of early elective surgery or angiographic embolization in selected high-risk patients to forestall recurrent bleeding remains controversial. Surgery is associated with mortality rates as high as 20 to 40% [2,3]. Indeed, with advances in therapeutic endoscopy, patients who developed failed endoscopic hemostasis are likely to be poor surgical candidates with multiple comorbidities.
Pour décrire en détail les expressions et informations de l'image originale, il est nécessaire de préciser les énoncés, les expressions scientifiques et les statistiques qui y sont incluses. Cependant, il est difficile de retrouver des informations précises sans le contexte de l'image originale. Il est possible que l'image contienne des détails spécifiques sur des études médicales, des techniques thérapeutiques ou des données statistiques liées à l'étude ou à la description clinique de la condition étudiée. Il faudrait consulter le texte ou le contenu graphique pour obtenir une compréhension complète du contenu de l'image. C'est un seuil difficile à atteindre sans le document original. Il est recommandé de faire référence aux études et aux données scientifiques pour obtenir des informations précises et pertinentes à propos de l'image originale.
condition. Negative or impractical endoscopy because of severe bleeding in hemodynamically unstable patients should prompt urgent angiography, whereas re-endoscopy should be first considered in stable patients. Continuing bleeding demands for emergency embolization, especially in high-operative-risk patients. In all cases, every effort should be made to perform angiography with embolization early after bleeding onset since longer time to angiography is known to be predictor of early rebleeding after TAE [5]. On the other hand, some authors state a preference for surgery in young and healthy patients, especially with large and/or multiple peptic ulcers at endoscopy, without having proved the inferiority of embolization in such a setting. Thus, in our institution, surgery is typically reserved for those patients whose bleeding failed to respond all previous treatments.

In conclusion, massive bleeding from a peptic ulcer remains a challenge. Optimal management required a multidisciplinary team of skilled endoscopists, intensivists, experienced UGI surgeons, and interventional radiologists. Endoscopy is the first-line treatment. The role for early elective surgery or angiographic embolization in selected high-risk patients to prevent rebleeding remains controversial. However, technological advances will probably broaden the indications for endovascular treatment of UGI bleeding from gastroduodenal ulcers after failed endoscopy. Although prospective studies are needed to compare these management strategies, the available data suggest that TAE is a good alternative to surgery and could be considered the salvage treatment of choice after failed endoscopic treatment. However, only high volume centers having access to sophisticated angiography rooms equipped with rotating gantries, and with 24-hour on call experienced and skillful interventional radiologists performing at least five endovascular embolization procedures per month, have the opportunity to use this technique as an alternative treatment.

Conflicts of interests : none.

References


