Emerging Hemostasis Methods for Refractory Bleeding: What Else?

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Introduction

Endoscopic biliary sphincterotomy (EBS) was developed in 1974\(^1,2\) and is considered a milestone in therapeutic endoscopic retrograde cholangiopancreatography (ERCP). Immediate and delayed EBS bleeding is an avoidable adverse event and its incidence has been reported in approximately 1-48% of cases.\(^3-9\) It varies between self-limiting and life-threatening bleeding and is occasionally associated with a considerable mortality rate of 0.3%.\(^3-10\) Apart from EBS, rarely but we encounter the endoscopic bleeding during stent exchange. In this lecture, I would like to introduce the several hemostasis techniques.

Endoscopic hemostasis due to EBS

In general, delayed post-EBS bleeding is frequently clinically significant and occasionally requires angiographic embolization or surgical intervention. Although the method of endoscopic hemostasis for controlling post-EBS bleeding depends on the severity, there are several options such as balloon tamponade, HSE injection, and thermal therapy. In almost all cases, complete hemostasis could be achieved using monotherapy or combined therapy.\(^9\) Recently, Hemospray is commercially available in some countries. In addition, several reports have advocated that one of promising hemostasis may be covered self-expandable metal stent (SEMS) placement for the mechanical compression of bleeding point.\(^11,12\) Lately, covered SEMS was used for refractory bleeding after endoscopic papillary balloon dilation.\(^13\)

Endoscopic hemostasis during stent exchange

In general, there are several methods of hemostasis for marked bleeding from bile duct. First, endoscopic tamponade by a catheter or balloon. However, marked bleeding usually is not stopped by using such simple technique. Then, as a next step, interventional radiology is considered. In the present case, however, emergent interventional radiology was impossible because his condition became shock status. Temporally or permanently tamponade by SEMS seems to be one of choice, in particular malignant diseases.\(^14\)
Conclusion

We should have several strategies for hemostasis for the post-EBS bleeding or acute bleeding during stent exchange. As a tentative tamponade, SEMS seems to be useful.

References