## **Urgent Versus Elective Endoscopy for Acute Non-variceal Upper Gastrointestinal Bleeding**

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Upper gastrointestinal endoscopy (esophagogastroduodenoscopy) is still the best supporting tool for the diagnosis and treatment of acute non-variceal upper gastrointestinal bleeding.1 Endoscopy can clearly detect most of the gastrointestinal bleeding-caused including erosion, ulcer, Dieulafoy's lesion, polyp, and cancer.<sup>2</sup> Besides for the diagnostic purposes, we can perform many treatments to stop upper gastrointestinal bleeding directly with endoscopy. The treatments for stopping or hemostasis of the upper gastrointestinal bleeding include injection sclerotherapy of adrenalin 1/10,000 - 1/20,000, injection of fibrin glue, endoscopic clips i.e. hemoclips or triclips, thermal treatment such as heat probe, bipolar probe or argon plasma coagulation (APC), endoscopic ligation, and embolization treatment.3

The timing of endoscopy in acute upper gastrointestinal bleeding is controversial.4 Some gastrointestinal endoscopy experts proposed urgent or emergency endoscopy (diagnostic and treatment) which is defined as gastrointestinal endoscopy procedure that was done as soon as possible (<6 hours) in urgent or emergency situation such acute gastrointestinal bleeding. Early endoscopy is defined as gastrointestinal endoscopy procedure that is done after the patient stabile, between 6 hours and 24 hours hospital admission. Elective endoscopy is defined as gastrointestinal endoscopy procedure which is done electively after the patient is stabile or usually after 24 hours hospital admission.<sup>4</sup> Bjorkman et al, found the timing of endoscopy (urgent vs elective) did not affect the resource utilization or patient outcomes and length of stay. Urgent endoscopy had more high-risk endoscopic lesions than elective endoscopy. Targownik et al, found that there was no significant difference of adverse bleeding outcomes between urgent/emergency endoscopy and early endoscopy procedure.<sup>5</sup> Lee JG et al found that early endoscopy is significantly reduced hospital stay and costs.<sup>6</sup>

In this issue Siregar et al, found that elective endoscopy does not affect the mortality and recurrent bleeding; however the length of stay is significantly correlated to the timing of endoscopic procedures. There were controversies about the timing of endoscopy in acute non-variceal upper gastrointestinal bleeding, further studies are required to know which one is the best timing of endoscopy procedure, urgent/emergency or early or elective.

## **REFERENCES**

- Gilbert DA, Silverstein FE. Acute upper gastrointestinal bleeding. In: Sivak MV, Schleutermann DA, eds. Gastroenterologic Endoscopy. 2<sup>nd</sup> ed. Philadelphia: WB Saunders 2000:I.p.284-300
- Elta GH. Approach to the Patient with Gross Gastrointestinal Bleeding. In: Yamada T, Alpers DH, Kaplowitz N, Laine L, Owyang C, Powell DW, eds. Text Book of Gastroenterology. 4<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins 2003:I.p.698-724.
- Simadibrata M. Injection and ligation in hemorrhoid. Symposium on Gastrointestinal Endoscopy and Digestive Diseases; 2011 Nov 26-27; Jakarta, Indonesia. Jakarta: Internal Publishing 2011.
- Bjorkman DJ, Zaman A, Fennerty MB, Lieberman D, Disario JA, Guest-Warnick G. Gastrointest Endosc 2004;60:1-8.
- Targownik LE, Murthy S, Keyvani L, Leeson S. The role of rapid endoscopy for high-risk patients with acute nonvariceal upper gastrointestinal bleeding. Can J Gastroenterol 2007;21:425-9.
- 6. Lee JG, Tumipseed S, Romano PS, Vigil H, Azari R, Melikoff N, et al. Endoscopy-based triage significantly reduces hospitalization rates and costs of treating upper GI bleeding: a randomized controlled trial. Gastrointest Endosc 1999;50:755-61.