

Capsule Endoscopy Optimal Timing in Obscure Overt GI bleeding

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Background: Video capsule endoscopy (VCE) has become the noninvasive diagnostic standard in the investigation of obscure gastrointestinal bleeding (OGIB), with a high positive and negative predictive value. However, the diagnostic yield of the VCE is thought to depend on when it was performed. We evaluate the optimal timing performing VCE relative to OGIB to improve the diagnostic yield. **Methods:** A total 271 patients had admitted and underwent VCE for overt OGIB between 2007 and 2016 in Samsung Medical Center, Seoul, Korea. To evaluate the diagnostic yield of VCE for OGIB with respect to timing of the intervention, diagnostic yield was analyzed according to the times after latest bleeding. The finding of VCE was classified into P0 or P1 (no potential for bleeding or uncertain hemorrhagic potential) and P2 (high potential for bleeding, such as active bleeding, typical angiodysplasia, large ulcerations, and tumors). **Results:** The P2 lesion was found in 106 patients and diagnostic yield of was 39.1% for OGIB. Diagnostic yield of VCE to detect P2 lesion was higher when it is performed closer to the time of latest bleeding (time interval between the VCE and latest bleeding: <24 hours, 47/63 (68.3%); 1 day, 16/43 (34.9%); 2 days, 18/52 (34.6%); 3 days, 13/43 (30.2%); 4 days, 7/28 (25.0%); 5-7 days, 6/24 (25.0%), and ≥ 8 days, 4/18 (22.2%); P-trend <.001). The interval between the VCE and latest bleeding were categorized into <24 hours (n=63), 25-72 hours (n=95), 4-7days (n=95) and ≥8 days (n=18). Multivariable analyses showed the odds ratio (OR) [95% confidence interval (CI)] for P2 lesion detection was 7.64 (2.09-27.94) in ≤ 24hrs group compared with >8 days group, respectively ($p<.002$). The proportion of patients who underwent therapeutic intervention including surgery, endoscopic intervention and embolization was higher when it is performed closer to the time of latest bleeding ($p=0.010$). **Conclusions:** Early deployment of VCE within 24 hours of the latest GI bleeding results in a higher diagnostic yield for patients with OGIB and consequently resulted in a higher therapeutic intervention rate.

Comparison of endoscopic submucosal dissection and surgery for the treatment of early gastric cancer

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Backgrounds: Endoscopic submucosal dissection (ESD) is believed to be a possible modality for early gastric cancer. However, there is little report about long term outcomes of the ESD directly compare with the surgery. The purpose of this study is the comparison between ESD and surgery about the long term clinical outcomes. **Methods:** From January 2003 to December 2010, 514 patients were treated with ESD and 686 patients were treated with subtotal or total gastrectomy. Using propensity score matching, 453 patients were analyzed per group. **Results:** The mean follow-up period was 42.6 months for ESD group and 54.1 months for surgery group. The overall survival (OS) and disease-free survival (DFS) rates were not significantly different between the ESD group and surgery group (log-rank test, OS: $p=0.84$, DFS: $p=0.906$). During follow up period, metachronous lesions were found in 2.4% in ESD group and 1.1% in surgery group ($p=0.148$). Although ESD group showed higher adenoma recurrence rate (1.6% vs 0%, $p=0.008$), ESD group showed similar cancer recurrence rate (2.2% vs 1.8%, $p=0.634$) compare with surgery group. ESD group showed less complications (4.5% vs. 16.3%, $p<0.001$) and shorter hospital day than surgery group (5.27 days vs. 12.09 days, $p<0.001$). **Conclusions:** Although ESD has higher adenoma recurrence rate, ESD has similar overall and disease-free survival rate than surgery. Furthermore, ESD has less complications and shorter hospital day than surgery. Therefore, ESD is an effective therapeutic method in early gastric cancer as well as surgery.