

Traumatic Rectal Perforation Managed by Endoscopic Clipping

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Introduction: Colonoscopy is widely used in the diagnosis and treatment of colon and rectal diseases. Colonoscopy is a relatively safe procedure. But complications have been reported sometimes. Perforation is one of the complications of colonoscopy. Endoscopic clipping of colon perforation has been reported recently. But the colon perforation due to trauma treated by endoscopy has never been reported in Korea. Here we report a case of traumatic rectal perforation managed by endoscopic clipping. **Case:** A 65-year-old male patient was referred to our hospital because he was stabbed in the abdomen with a twig. At the emergency department, his vital signs were blood pressure 130/80 mmHg, heart beat 64 beats/minutes and temperature 36.9°C. The laboratory findings showed white blood cell 9930/ μ L, hematocrit 33.5%, hemoglobin 12.0 g/dL, platelet count 154,000/ mm^3 , aspartate aminotransferase 29 IU/L, alanine aminotransferase 25 IU/L. Chest X-ray showed that free air in the peritoneum was absent. On initial abdominal computed tomography findings, it showed intraluminal active bleeding in the upper rectum and retroperitoneal hematoma about 9.8cm size. Perforation site with hematoma in the sigmoid colon (anal verge 10cm) was seen at colonoscopy. The perforation site was enclosed completely by endoscopic clipping. He was also treated with antibiotics. After 10 days, the size of the hematoma reduced to about 3.9cm and there was no evidence of infection. After 1 month, the perforation site was completely healed and became a hole-like scar changes without external tract or opening. **Conclusions:** We were able to perform endoscopic clipping as a less invasive treatment because the patient had no signs of peritonitis. The patient's hematoma was reduced and his clinical symptoms were improved. The most important aspect of colon perforation treatment is to reduce the contamination within the peritoneal cavity. Endoscopic clipping is preferred in that it seals the perforated area directly. Thus, we showed good results in traumatic rectal perforation treated by endoscopic clipping.

Clinical outcomes of Lower gastrointestinal bleeding

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Goals: The aim of this study was to identify the clinical outcomes of lower gastrointestinal bleeding (LGIB) and predictors of poor outcomes in LGIB compared with those of upper gastrointestinal bleeding (UGIB). **Background:** The incidence of LGIB are increasing, however, predictors of outcomes in LGIB are not as well-defined as in UGIB. **Study:** This study was performed in patients with LGIB or UGIB who underwent endoscopic procedures between July 2006 and February 2013. Propensity score matching was used to improve comparability between LGIB and UGIB groups. The clinical outcomes and predictors of 30-day rebleeding and mortality rate were analyzed between two groups. **Results:** In total, 601 patients affected with UGIB (n = 500) or LGIB (n = 101) were finally eligible, and 202 patients with UGIB and 101 patients with LGIB were analyzed after 2:1 propensity score matching. The 30-day rebleeding and mortality rate were 9.9% and 4.5% for UGIB group and 16.8% and 5.0% for LGIB group, respectively. After logistic regression analysis, Rockall score ($p = 0.013$) and CRP ($p = 0.047$) were significant predictors of 30-day mortality, however, nothing predicted rebleeding in patients with LGIB. **Conclusions:** The clinical outcomes of LGIB are not better than those of UGIB. Clinical Rockall score and serum CRP level may be used as a predictor of 30-day mortality in the patients with LGIB.

| Variables | UGIB | | LGIB | |
|-------------------------|---------------------|---------|----------------------|---------|
| | OR (95% CI) | P-value | OR (95% CI) | P-value |
| Age (yr) | 1.020 (0.980-1.061) | 0.334 | 1.060 (0.990-1.135) | 0.092 |
| Sex (male) | 0.794 (0.207-3.053) | 0.738 | 0.456 (0.073-2.858) | 0.402 |
| Major comorbidity (yes) | 2.113 (0.547-8.170) | 0.278 | 4.038 (0.638-25.555) | 0.138 |
| Clinical Rockall score | 1.693 (1.115-2.571) | 0.014 | 2.081 (1.170-3.700) | 0.013 |
| GBS/Modified GBS score | 2.162 (1.426-3.277) | <0.001 | 1.302 (0.980-1.729) | 0.069 |
| Hemoglobin | 0.731 (0.536-0.996) | 0.047 | 0.995 (0.735-1.347) | 0.975 |
| C-reactive protein | 1.125 (1.026-1.234) | 0.012 | 1.174 (1.002-1.376) | 0.047 |