Efficient diagnosis and therapy of gastrointestinal bleeding can be life-saving in acute clinical situations. Patient history and judgement of primary symptoms often allow for immediate differentiation of upper and lower gastrointestinal bleedings. In upper gastrointestinal bleedings, emergency endoscopy with localisation and classification of the source of bleedings (Forrest) is essential. This is always combined with an attempt of endoscopic injection therapy to stop the bleeding. If the source of bleeding remains unclear after gastro- and colonoscopy, angiography can be helpful. If angiography detects the bleeding, embolisation of the bleeding vessel should be considered. In selected cases where the localisation of gastrointestinal bleeding remains unclear, high ileostomies can be of help for repeated small-gut endoscopy and therapy. Intraoperative endoscopies are an additional tool for detecting bleeding lesions in the small gut, which can be subsequently resected. Copyright © 2000 S. Karger GmbH, Freiburg