

The bleeding gastroduodenal Ulcer-from a surgical and endoscopic point of view-a retrospective analysis of patients from 1992 to 1997 admitted to the Wenckebach Hospital

Background: Bleeding as a complication of the decreasing number of ulcer diseases remains constant. The concept of treating upper gastroduodenal ulcer bleeding has changed. The wider use of endoscopic hemostasis in upper gastroduodenal bleeding has reduced the need of surgery significantly.

Methods: 322 patients with an upper gastroduodenal ulcer haemorrhage were admitted to the Wenckebach-Hospital from 1992 to 1997 and retrospectively analyzed. All patients, 173 males and 149 females had endoscopic treatment when admitted.

Results: Causes for bleeding were duodenal ulcer (54%), gastric ulcer (33%) or Mallory-Weiss-lesions, Dieulafoy's lesions, ulcer of anastomosis and angiodysplasia.

The median age was 69,5 years with 30% of patients exceeding the age of 80 years. 214 patients had endoscopic treatment, including endoscopic injection of adrenalin/suprarenin (62%) or fibrin sealant (36%). The eradication of *Helicobacter pylori* was shown in 48%.

108 patients underwent surgery. Emergency surgery (46%) was necessary for patients with massive ulcer bleeding (Forrest IA) or rebleeding after endoscopic treatment. Rebleeding was in 50% the indication for surgery. 54% underwent an early elective surgery within 2 days after bleeding stops. Recurrent bleeding occurred in 24% and 80% had surgery. Billroth I was performed in 50% of all operations. Overall hospital mortality rate was 13,6%; 19% for patients who underwent surgery (emergency surgery 32% and elective surgery 8%). Hospital mortality was 11% for endoscopically treated patients and 22% for recurrent bleeding.

Conclusion: Most patients with acute upper gastroduodenal haemorrhage are managed conservatively because of endoscopic intervention. The role of surgery has changed but is still an important part of the therapeutic concept for treating gastroduodenal ulcer bleeding. To decrease the need of emergency surgery and lower the mortality rate it is important to be aware of risk factors (age, haemoglobin concentration, bleeding activity, transfusion requirements, location of ulcer). The challenge appears to involve the appropriate selection of patients who benefit from early operation in a close cooperation between endoscopists and surgeons.