Endoscopic versus operative treatment in high-risk ulcer bleeding

patients - results of a randomised study.

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Publication Date: 2003

Abstract:

BACKGROUND AND AIMS: The treatment of peptic ulcer bleeding is still a matter of controversy in

high-risk patients with arterial bleeding or a visible vessel. Patients with recurrent bleeding during

hospital stay carry an increased risk of death. Therapeutic concepts using early elective operation

compete with solitary endoscopic treatment. Numerous prospective studies have contrasted

comparable improvements for the different therapeutic regimens but there is still a lack of a

randomised comparison.

PATIENTS AND METHODS: We initiated a multicentre randomised clinical trial comparing

endoscopic fibrin glue injection with early elective operation in peptic ulcer patients with arterial

bleeding or a visible vessel > or =2 mm. After initial endoscopic control of bleeding, patients were

randomised to repeated fibrin glue injection or early elective operation. Outcome criteria were

recurrent bleeding and death. The study was terminated after a planned interim analysis.

RESULTS: Due to strict inclusion and exclusion criteria 61 patients were randomised and 55

patients could be included in the per-protocol analysis, 23 in the early elective operation group and

32 in the patient group with endoscopic therapy. The type of surgery in the early elective operation

group was usually gastric resection (79%). Recurrent bleeding occurred in 50% of the

endoscopically treated patient group, and in the operative group in one patient (relative risk: 11.5;

95% CI: 1.6 to 80.7). There were no statistically significant differences between the two treatment

groups with respect to mortality (relative risk: 0.7, 95% CI: 0.1 to 4.8).

CONCLUSION: Early elective surgery is an effective procedure in bleeding peptic ulcer patients at high risk for re-bleeding. Fibrin glue injection carries a risk for re-bleeding, however, the majority of these re-bleeding episodes can be controlled by re-endoscopic treatment, but a subgroup will need an emergency operation with a fatal outcome in individual patients.