Journal of Gastroenterology and Hepatology
JGHF
doi:10.1111/jgh.16665

TECHNICAL NOTE

Endoscopic *versus* medical management of peptic ulcers with adherent clots: Overcoming hesitation through education

G Allo, D Nierhoff and P Kasper

Department of Gastroenterology and Hepatology, Faculty of Medicine, University Hospital Cologne, Cologne, Germany

To the editor,

We read with great interest the recent systematic review and meta-analysis by *Tassone et al*. on the management of peptic ulcer disease with adherent clots which demonstrated a significant reduction in recurrent bleeding with endoscopic hemostatic techniques compared with medical management alone.[1] These results are highly relevant given the lack of clear recommendations in international guidelines for the optimal endoscopic treatment of adherent clots in peptic ulcer disease.[2,3] The study highlights the potential benefits of endoscopic intervention and emphasizes the need for a more proactive approach in clinical practice.

However, it should be noted that the majority of the studies reviewed were performed in high-volume centers, where the expertise and experience of the endoscopists may not be transferable to centers or endoscopists with less experience. In an earlier Italian study, the authors observed that less experienced endoscopists were less likely to remove clots due to fear of uncontrollable bleeding.[4] Similarly, a recent study of emergency endoscopy training by our group showed that trainees with experience of less than 10 emergency endoscopies were significantly less likely to perform endoscopic treatment of adherent clots compared to more experienced endoscopists.[5]

Inspired by the relevant study findings by *Tassone et al*., we performed a retrospective analysis of 82 cases of peptic ulcer disease with adherent clots managed at our tertiary care center between 2015 and 2022 and analyzed the treatment measures performed according to the experience of the endoscopists. The median age of our cohort was 70 years, and 30.5% were women. The majority of ulcers were located in the duodenum (56.1%), and 45.1% of patients required more than two packed red blood cell transfusions. Endoscopic hemostatic treatment was performed in 35.4% of cases and was associated with a rebleeding rate of 11.5% compared to 36.7% with medical therapy alone ($P = 0.021$), confirming the results of the study by Tassone *et al*.

Emergency endoscopies were performed by endoscopists with varying levels of experience: 11.0% by those with experience of less than 10 emergency endoscopies, 24.4% by those with 10–50 endoscopies, and 64.6% by those with more than 50 endoscopies. Adjusting for investigators experience, the endoscopic treatment rates were 11.1%, 35.0%, and 39.6%, respectively, with 30-day rebleeding rates of 44.4%, 30.0%, and 20.8%. Surgical intervention was required in 0%, 5.0%, and 3.8% of cases while radiologic intervention was required in 11.1%, 5.0%, and 3.8% of patients, respectively. Although our results show a numerical trend, the small sample size of cases within endoscopists groups may have resulted in the absence of clear statistical differences ($P > 0.05$).

However, we believe that these findings underscore the importance of intensive training in emergency endoscopy to achieve competence in the management of gastrointestinal bleeding, as a lack of confidence in performing recommended procedures such as clot removal may result in adverse patient outcomes.

Based on the results of the study of Tassone *et al*. and our own experience, we advocate the inclusion of a minimum number of emergency procedures in training programs for young gastroenterologists and endoscopists to improve trainees' competence and confidence in managing gastrointestinal bleeding and complex cases involving clot removal.

A minimum number of 10–25 emergency endoscopies, recently recommended by the European Society of Gastrointestinal Endoscopy (ESGE), may be used as a guidance, although further studies are urgently required.[6]

Acknowledgments

Open Access funding enabled and organized by Projekt DEAL [Correction added on 24 February 2025, after first online publication: Projekt DEAL funding statement has been added.].

Data availability statement. The data sets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

[Correction added on 24 February 2025, after first online publication: The copyright line was changed.]

References

1 Tassone D, Kazi S, Lee T, Gilmore R, Ding N. Systematic review and meta-analysis of endoscopic *versus* medical management of peptic ulcers with adherent clots. *J. Gastroenterol. Hepatol.* 2024. https://doi.org/10.1111/jgh.16611.

2 Gralnek IM, Stanley AJ, Morris AJ *et al*. Endoscopic diagnosis and management of nonvariceal upper gastrointestinal hemorrhage (NVUGIH): European Society of Gastrointestinal Endoscopy (ESGE) Guideline—update 2021. *Endoscopy* 2021; **53**: 300–32. https://doi.org/10.1055/a-1369-5274.

3 Laine L, Barkun AN, Saltzman JR, Martel M, Leontiadis GI. ACG clinical guideline: upper gastrointestinal and ulcer bleeding. *Am. J. Gastroenterol.* 2021; **116**: 899–917. https://doi.org/10.14309/ajg.0000000000001245.

4 Parente F, Anderloni A, Bargiggia S *et al*. Outcome of non-variceal acute upper gastrointestinal bleeding in relation to the time of endoscopy and the experience of the endoscopist: a two-year survey. *World J. Gastroenterol.* 2005; **11**: 7122–30. https://doi.org/10.3748/wjg.v11.i45.7122.

5 Allo G, Lang S, Martin A *et al*. Learning curve of achieving competency in emergency endoscopy in upper gastrointestinal bleeding: how much experience is necessary? *BMJ Open Gastroenterol.* 2024; **11**: e001281. https://doi.org/10.1136/bmjgast-2023-001281.

6 Antonelli G, Voiosu AM, Pawlak KM *et al*. Training in basic gastrointestinal endoscopic procedures: a European Society of Gastrointestinal Endoscopy (ESGE) and European Society of Gastroenterology and Endoscopy Nurses and Associates (ESGENA) position statement. *Endoscopy* 2024; **56**: 131–50. https://doi.org/10.1055/a-2205-2613.