



Transcatheter arterial embolization versus surgery for uncontrolled peptic ulcer bleeding: game is over

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Submitted Jan 12, 2019. Accepted for publication Jan 31, 2019.

doi: 10.21037/qims.2019.02.01

View this article at: <http://dx.doi.org/10.21037/qims.2019.02.01>

Recently, Sverdén *et al.* published an article comparing surgery with transcatheter angiographic embolization (TAE) in the treatment of peptic ulcer bleeding uncontrolled by endoscopy (1). We have several comments. First of all, we would like to congratulate the authors for their study which represents the main series to date comparing outcomes of TAE with those of surgery for refractory peptic ulcer bleeding. Angiography with TAE provides a nonoperative option for patients whose acute peptic ulcer bleeding has not been controlled by endoscopy. Primary technical success rates range between 51% and 97%, with recurrent bleeding requiring repeated embolization procedures in approximately 10% to 20% of patients (2). In a recent meta-analysis that included 6 retrospective comparative studies involving 423 patients, a higher re-bleeding rate was observed after TAE, suggesting surgery more definitively secured hemostasis (3). This meta-analysis failed to show any significant difference in mortality rate between the two modalities despite the fact that the TAE patients were older and in poorer health, suggesting an obvious bias of selection. The present comparative study, the larger to date, at last indicates a better prognosis in patients undergoing TAE compared with surgery, with a shorter hospital stay and lower risk of complications, despite a higher risk of re-bleeding which may be explained by incomplete embolization procedures remaining to state in the technical part of the study. In international consensus recommendations on the management of peptic ulcer bleeding, TAE should be considered as an alternative to surgery, if expertise is available, for patients in whom

primary endoscopic hemostasis fails or who have recurrent bleeding (4). The present study even indicates that TAE may be recommended as a first-line treatment in these patients. So, will surgery be replaced with TAE in peptic ulcer bleeding? Only a future randomized controlled trial (RCT) can answer this question. However, this trial will never be feasible. The authors mentioned the only RCT that attempted to compare TAE with surgery in such a setting (5). However, only 31 patients were included during 7 years of inclusion, illustrating the impossibility to perform RCTs on this topic. Furthermore, we would like to specify that results of this trial have never been published in any peer-reviewed journal as a scientific article, but only as an abstract. So, do we need this trial to consider TAE as a better therapeutic option than surgery in patients with peptic ulcer bleeding in whom primary endoscopic hemostasis fails? Of course not. Results from the literature, especially from the current study, are more than enough to accept the fact that game is over and that TAE should be considered as the first-line treatment in patients who have access to interventional radiology techniques. The role of the surgeon in this clinical sphere is diminishing and will continue to diminish in ensuing years. Instead, every effort should be made to give access to TAE to all patients with refractory peptic ulcer bleeding in order to avoid surgery as much as possible. The lack of high level of evidence about the superiority of TAE over surgery must not lead us to forget what is the best for patients.

In conclusion, let's stop to waste time trying to do unnecessary and impossible RCTs on this topic. The already

existing literature, our clinical practice in real life and the common sense should lead us to consider that TAE is not an alternative to surgery...this is just the other way round!

Acknowledgements

None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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Cite this article as: Loffroy R, Comby PO, Falvo N, Pescatori L, Nakai M, Midulla M, Chevallier O. Transcatheter arterial embolization versus surgery for uncontrolled peptic ulcer bleeding: game is over. *Quant Imaging Med Surg* 2019;9(2):144-145. doi: 10.21037/qims.2019.02.01