INVITED COMMENTARY

Sigmoidoscopy an Effective Tool for Identifying Colonic Ischaemia After Ruptured AAA

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The study by Jalalzadeh et al.[1] investigated the effectiveness of sigmoidoscopy for identifying colonic ischaemia (CI) in patients who suffered ruptured abdominal aortic aneurysms (RAAAs) in the Dutch Dream Trial.

The indication for sigmoidoscopy was a clinical suspicion of CI of the attending vascular surgeon or intensive care physician. Sigmoidoscopy was performed in 13% of cases, of whom half were diagnosed with CI. Furthermore, sigmoidoscopy was effective at identifying transmural colonic ischaemia confirmed at laparotomy, when reported moderate to severe on endoscopy. The positive predictive value of 73% for moderate to severe CI is in keeping with the 68% reported in a recent meta-analysis of routine endoscopy following RAAA repair.[2]

Perhaps the most important finding of this study was that a negative sigmoidoscopy effectively ruled out CI with a negative predictive value of 100%. Thus sigmoidoscopy can potentially prevent the need for re-look laparotomy and it's associated morbidity in this patient group.

CI is a severe and often fatal complication of ruptured AAA.[3] Early detection is vital if outcomes of this devastating problem are to be improved. Unfortunately, the authors were not able to identify the delay from the first suspicion of CI to sigmoidoscopy and subsequent laparotomy, or whether the logistics of organising and performing a sigmoidoscopy in this setting added additional delays to definitive laparotomy and colonic surgery and perhaps impacted on outcome. In many institutions the provision of an emergency and out of hours sigmoidoscopy service is limited. In these settings computed tomography (CT) imaging or perhaps diagnostic laparotomy are acceptable alternatives, if the clinical suspicion of CI is high and certainly preferable to a delayed endoscopy the following day.

These patients are frequently on intensive care, often with multiple organ failure (MOF) and there may be a desire to avoid a contrast enhanced CT in the presence of acute kidney injury. However, delayed diagnosis of CI will result in poorer outcomes and I would advocate contrast CT, if sigmoidoscopy was not available, even if it is likely to lead to haemofiltration or dialysis. Frequently patients with transmural CI will already be dialysing for the associated metabolic acidosis and associated MOF. The importance of early diagnosis and treatment of CI in this patient group cannot be overestimated.

There are some limitations of this study and in particular the authors could not demonstrate the lower incidence of CI for EVAR patients when compared with those undergoing open surgical repair, which was identified in a recent meta-analysis in the elective AAA setting.[4] This reflects the small number of cases of CI in the EVAR arm and underlines one of the limitations of post hoc sub-group analysis of a randomised controlled trial.

This study clearly underlines the value of sigmoidoscopy, when there is a clinical suspicion of CI in patients following RAAA repair. Vascular surgeons should have a low threshold for its use and promote the 24/7 availability of sigmoidoscopy in all units performing RAAA surgery.

REFERENCES

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