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## Antifibrinolytics and current anaesthetic

Editor—We read with interest the article by Ortmann and colleagues.<sup>1</sup> One aim of the highly informative and well-written review article was to enhance further discussion regarding the use of antifibrinolytic agents.

One important area not mentioned in the article on the use of antifibrinolytic agents is the effective role these agents have in major oncological surgeries. During the resection of retroperitoneal sarcomas, for example, massive intra- and post-operative blood loss is not uncommon. Such patients often possess multiple risk factors for haemorrhage; these include tumour factors modulating the fibrinolytic process, the effects of chemotherapeutic agents, and the presence of anticoagulant drugs.<sup>2</sup> These together with the complexity of surgical resection undertaken and vascularity of the tumour present a clinical scenario where antifibrinolytics can be effectively used. It is our view that antifibrinolytic agents are an important intervention not to be overlooked.

Although antifibrinolytics have very little inherent pro-thrombotic property, we would be grateful if the authors could share their experience on the use of antifibrinolytics in patients who have an indwelling inferior vena caval filter.

## Declaration of interest

None declared.

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## Use of antifibrinolytics in liver transplantation

Editor—We read with interest Dr Ortmann and colleagues' review on the role of antifibrinolytics.<sup>1</sup> With regard to liver

transplantation, it was highlighted that more than three-quarters of patients undergoing this procedure develop peri-operative hyperfibrinolysis, and prophylactic antifibrinolytic agents should be considered.<sup>1</sup> This quoted incidence of fibrinolysis was from a prospective observational study of 23 patients in Bordeaux based on a reduction in euglobulin lysis time (ELT) >50% in 18 patients (78.3%).<sup>2</sup> Only two patients (8.7%) had a ROTEM demonstrating a typical hyperfibrinolysis trace. The use of antifibrinolytics in instances of bleeding was not emphasized.

Perioperative bleeding in liver transplantation is often multifactorial. Point-of-care coagulation testing allows early detection of hyperfibrinolysis in the bleeding patient and informs clinicians about the individual patient's requirement for antifibrinolytic drugs.<sup>3</sup> These agents may increase the risks of vascular occlusion of the graft and other thrombotic events.<sup>4</sup> While this was not demonstrated in a meta-analysis published in 2007, its limitations were numerous and the authors clearly state a large prospective randomized trial with thromboembolic events as the primary endpoint would be preferable to determine actual risk.<sup>5</sup>

In our unit, we have just completed a review of ROTEM data for 181 consecutive liver transplant procedures and, in a similar fashion to Roulet and colleagues in Bordeaux, assessed coagulation at five fixed time-points during surgery. Our data showed that 12 of 181 patients (6.7%) developed fibrinolysis during liver transplantation. All of these cases were treated successfully with tranexamic acid. We therefore suggest that routine administration of antifibrinolytics is not indicated, given its low incidence and success of treatment when identified.

In view of the potential for thrombotic complications, we reserve the use of antifibrinolytic agents to those patients who are bleeding and have a ROTEM demonstrating a typical hyperfibrinolysis trace.

## Declaration of interest

None declared.

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systematic review and meta-analysis. *Am J Transplant* 2007; 7: 185–94

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## Scissor-like manoeuvre of tracheal tube

Editor—I read the correspondence by Dr Biro<sup>1</sup> describing his 'Reflective intubation' method with keen interest and I totally substantiate his method as I personally have been using a manoeuvre, albeit different from the one described by him in accessing many of the difficult airways I had encountered.

I manoeuvre the radius of curvature of the polyvinylchloride tracheal tube at the holding point of the tube during intubation and make a scissor-like manoeuvre with my middle and ring fingers of my right hand, bending the tube to the required degree with my middle finger and holding it in place with my ring finger at the bend and then introduce into a more anteriorly placed laryngeal inlet with ease (Fig. 1).

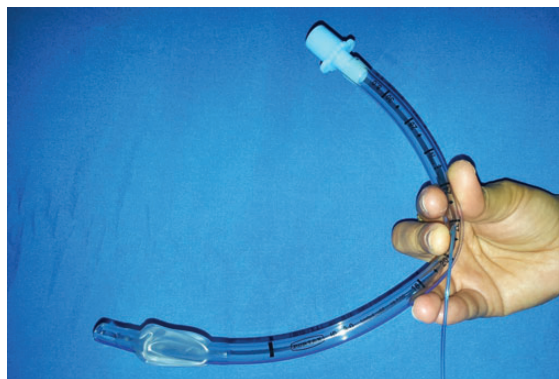


Fig 1 Tube bent.

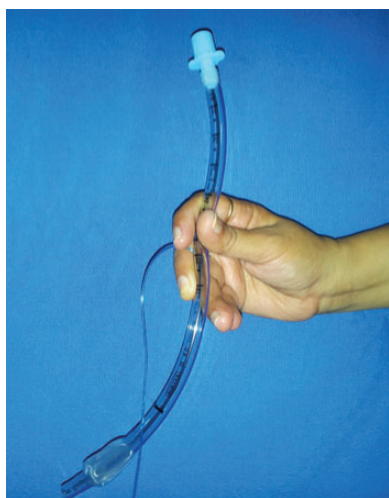


Fig 2 Tube extended.

Similarly, the tube is bent the other way, that is, making it straighter with a similar scissor-like manoeuvre with the middle finger bending the tube away from the concavity and the ring finger holding it in place and then introducing it (Fig. 2). I personally found that these manoeuvres, as the author rightly said, are simple, easy to perform (with a bit of practice), cost-effective, less traumatic, and a faster access to the airway (even without external laryngeal manoeuvre most of the time) is achieved. I have been training my anaesthesia residents too in this simple technique for some years now and it is being practiced successfully by them too.

As Dr Biro has suggested, a thorough scientific investigation is warranted for assessing the efficacy of such manoeuvres, so that they may perhaps play an intermediate role in the airway algorithms before usage of more invasive introducers, stylets, etc.

## Declaration of interest

None declared.

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- 1 Biro P. Reflective intubation: a simple and effective method to improve intubation conditions by elevating the tip of the tube without additional equipment. *Br J Anaesth* 2013; **111**: 505–6

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## Assessment of anaesthetists' ability to predict difficulty of bag-mask ventilation

Editor—I read with interest the Correspondence by Roberts and colleagues<sup>1</sup> regarding the anaesthetists' ability to predict difficult bag-mask ventilation (BMV). Their findings show unreliable preoperative prediction of quality of BMV after induction of anaesthesia. However, the authors do not specify how many patients had received a neuromuscular blocking agent at the time of assessment of BMV. Such information is important because there is considerable evidence that early muscle relaxation will facilitate BMV.

The findings of a prospectively assessed algorithm for difficult airway management including 12 221 BMVs are one example in support of the benefit of early muscle relaxation on the quality of BMV.<sup>2</sup> Patients with indications for awake fiberoptic intubation were excluded. The algorithm required that patients with three and more risk factors for difficult airway management receive succinylcholine right after induction of anaesthesia without prior assessment of quality of BMV. There were 188 patients who qualified for this approach. After administration of succinylcholine, BMV was grade I (ventilation without need for an oral airway) or II (ventilation requiring oropharyngeal airway) in 175 (93%), grade III (difficult and variable ventilation requiring an oral airway and two providers, or an oral airway and one provider using pressure-controlled mechanical ventilation requiring 25 cm H<sub>2</sub>O) in 12 (6.3%),