

phone, especially in emergency situations, as it is not possible for clinicians to review the TEG graph themselves (which may be still ongoing). I would like to bring to attention a potential error that can happen with this practice.

Case report

A 65-yr-old male who had undergone aortic valve replacement had postoperative bleeding in cardiac surgical intensive care. TEG was performed to find out whether the bleeding was secondary to coagulation dysfunction or due to surgical failure to attain adequate haemostasis. As this patient had undergone heparinization for cardiopulmonary bypass, TEG was performed using a plain cup as well as a heparinase cup. The TEG results were normal with the heparinase cup (Fig. 1a) and abnormal with the plain cup (Fig. 1b), even though it was done with the same sample of blood.

Discussion

The abnormal graph generated by TEG using the plain cup did not fit with the typical graph generated with coagulopathies. This could have been attributed to abnormal coagulation (effect of residual heparin in this case, even though it did not fit into the typical effect of residual heparin) by clinicians who have limited experience with TEG. Values generated from the plain cup in

this case could also be interpreted as abnormal clot lysis, if plain cup result was interpreted alone.

The abnormal TEG in the plain cup was due to a mechanical disturbance to the TEG machine, resulting in the breakage of the formed clot generating an abnormal graph and values. A mechanical disturbance typically occurs if someone tries to load another sample in the second channel of the same TEG machine. In these circumstances if the clinician is not able to review the TEG graph and a wrong diagnosis of coagulopathy is made, inappropriate treatment might be initiated with potentially disastrous consequences. This case highlights the importance of reviewing the TEG graph along with the values before embarking on treatment based on TEG results.

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Definition of difficult tracheal intubation

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EDITOR:

We read with interest the article by Yildiz and colleagues [1] about the prediction of difficult tracheal intubation. In the paper, there is a point that needs clarification. The authors state that the ASA Task Force on Management of the Difficult Airway defines difficult tracheal intubation as follows: 'when proper insertion of the tracheal tube with conventional laryngoscopy requires more than three attempts or more than 10 min' [1]. That definition belongs to the 1993 ASA guidelines [2]. In the 2003 updated report, the ASA Task Force has

revised the old numerical definition and now defines difficult tracheal intubation simply as 'requiring multiple attempts' [3].

Repeated airway interventions may potentiate tissue trauma, bleeding and mucosal oedema and may transform an airway that can be ventilated to one that cannot (cannot ventilate, cannot intubate situation) [4]. A recent study confirmed that the rate of complications was directly related to the number of laryngoscopic attempts during emergency airway management [5]. The risk of airway and even haemodynamic complications increased with the second laryngoscopic attempt and rapidly accelerated with three or more attempts [5]. In particular, the third intubation attempt during airway manipulation was found to be a risk factor contributing to cardiac arrest [6]. The latest analysis of the ASA closed claims database for management of the difficult airway

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showed that persistent intubation attempts during airway emergencies were significantly associated with death or brain damage [7]. In light of the complications associated with multiple laryngoscopy attempts, it seems advisable not always to proceed with three intubation attempts, but to limit the attempts to one or two under optimal conditions, before using a secondary airway plan. The evidence presented justifies the change by the ASA Task Force of their definition for a difficult tracheal intubation and the abolition of the three attempts as a cut-off.

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Postoperative pain and vomiting after orbital wall surgery in trauma

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EDITOR:

Blunt orbital trauma with need of surgical repair is common. Postoperative complications are rare but may include retrobulbar haematoma [1], which may be serious since it can evolve rapidly into visual impairment or even permanent loss of vision [2]. Anaesthetists implicated in the postoperative care of such patients should be aware of this problem and its symptoms in order to act rapidly in an adequate way. Isolated treatment of pain and nausea and vomiting may result in permanent loss of vision within hours.

Acute retrobulbar haemorrhage can follow as a severe complication of trauma, retrobulbar injections [3], orbital surgery or even minor eyelid surgery [4] with potentially devastating consequences such as loss of vision. Being aware of this potential complication and a rapid computed tomography (CT) scan may prevent grave sequel. This case

highlights the need for increased awareness after blunt orbital trauma and orbital surgery.

Case report

A 41-yr-old male was involved in a dispute and punched in the face. In the emergency room the patient was conscious, had amnesia for the event, a right periorbital ecchymosis and haematoma but no nausea, vomiting or any visual deficit. A CT scan of the skull and brain revealed a fracture of the right maxillary sinus, including a haematosinus and a medial and inferior orbital wall fracture with a minor enophthalmus. Clinically, the patient described a minimal infra- and supraorbital hypoesthesia. The patient was transferred to an intermediate care unit for neurological surveillance and a conservative treatment was planned for the orbital wall fracture. Routine blood tests, including coagulation studies, were within norm ranges.

Over the next 7 days, the hypoesthesia did not improve and the decision for surgical intervention was taken. The plastic and reconstructive surgeons performed a neurolysis of the infraorbital nerve and introduced a poly-*p*-dioxanon plate (PDS plate, 0.5 × 40 × 50 mm; Johnson & Johnson,

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