Reviewer’s report

Title: Tracheostomy in intensive care unit patients can be performed without bleeding complications in case of normal thromboelastometry results (EXTEM CT) despite increased PT-INR: a prospective pilot study

Version: 6 Date: 22 April 2015

Reviewer: Klaus Görlinger

Reviewer’s report:

The authors addressed all my questions and comments, adequately. Therefore, I suggest only one minor discretionary revision:

I do not completely agree with the section added in red due to the comment of the other reviewer. It is true that platelet dysfunction, e.g. due to antiplatelet drugs, cannot be detected by ROTEM. However, the effect of thrombocytopenia is well reflected.

Greene et al. demonstrated that ROTEM clot firmness (A10 or MCF in INTEM or EXTEM) is superior to platelet count in predicting bleeding in pediatric patients with ITP and severe thrombocytopenia (< 30x10^9/L). Furthermore, Fayed et al. reported that a ROTEM-guided transfusion protocol in patients undergoing liver transplantation can avoid 75% of platelet transfusions in patients with a platelet count < 50x10^9/L without increased bleeding rate.

Therefore, I recommend modifying this discussion section (page 9, line 3-7) as follows and adding two references:

Beiderlinden at al. found that bleeding incidence during and following dilatational tracheostomy was higher in patients with prolonged APTT and with platelets below 50x10^9/L [21]. This may be true as platelets below 50x10^9/L are generally connected with prolonged bleeding time and impaired primary hemostasis. That is why our patients had at least this number of platelets. Notably, platelet dysfunction due to antiplatelet drugs cannot be detected by ROTEM. However, Greene et al. demonstrated that ROTEM clot firmness (A10 or MCF in INTEM or EXTEM) is superior to platelet count in predicting bleeding in pediatric patients with ITP and severe thrombocytopenia (< 30x10^9/L) [Greene 2014]. Furthermore, Fayed et al. reported that a ROTEM-guided transfusion protocol in patients undergoing liver transplantation can avoid 75% of platelet transfusions in patients with a platelet count < 50x10^9/L without increased bleeding rate [Fayed 2014]. Therefore, clot firmness (A10 or MCF) should be considered in addition to CT in particular in patients with thrombocytopenia.

Then continue with “When it comes to APTT, …”.

Page 9, line 6: Typo, please correct ‘hemosthasis’ to ‘hemostasis’.

Additional references:


I recommend accepting the manuscript for publication in BMC Anesthesiology after realizing this small modification.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

During the last five years I received travel reimbursements and lecture fees by Tem International GmbH, Munich, Germany. Since July 2012 I am the Medical Director of Tem International GmbH, Munich, Germany.