

Postpartum Hemorrhage: A Rising Problem Requiring to Think Out of the Box

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Dear Editor,

Postpartum hemorrhage (PPH) is one of the major causes of maternal morbidity and mortality with worldwide increasing incidence. PPH causes about 30% of maternal deaths. It is estimated that every hour ten women die from PPH. In the face of alarming data about rising PPH-related maternal mortality (and also severe morbidity associated with need for blood transfusions or invasive surgical measures such as hysterectomy), we have to find new solutions. Despite increasing efforts, the outcome is deteriorating – thus, we need to think out of the box.

With this special volume, we shine light on the respective pathophysiology and possible new options to prevent, attenuate and, if necessary, treat PPH. We envision that prevention and early intervention will decrease frequency and the severity, and thus the complexity of treating PPH, later on.

Such a strategy is reflected by applying a classical patient blood management approach to pregnant women moving toward delivery. This should allow us to identify women at risk for high peripartum blood loss at an earlier stage during pregnancy and to treat anemia rigorously with the goal of higher prepartum hemoglobin levels in these women. The early and appropriate use of uterotonics as well as early treatment with tranexamic acid are the next steps, accompanied by point-of-care backed coagulation management and well-timed use of cell savers in

case of severe PPH. As any ongoing severe PPH will lead inevitably to a coagulation disorder, it seems – in the light of new research results – reasonable to reconsider the current approach of many guidelines and institutional protocols that set the administration of fibrinogen at the first place of coagulation management in severe PPH. The new results from randomized controlled trials suggest that increasing fibrinogen concentrations beyond already increased concentrations in pregnancy is not an effective approach to prevent or treat PPH. Recently newly identified insights of the pathophysiological coagulation pathway in parturient women, such as the role of coagulation factor XIII and platelets, offer new, urgently needed, treatment options to be explored. If PPH can still not be brought to resolution with the abovementioned approaches, the use of interventions such as embolization of the pelvic arteries can be of help stop the bleeding and avoid invasive surgery – such as uterus compression sutures or hysterectomy with the associated burden for the women. Besides the widely accepted efficacy of pelvic artery embolization, we need more long-term data regarding the effect of embolization on menstruation patterns and fertility. We hope that the articles provided in this volume will invite and stipulate all of us to think out of the box, help cover the abovementioned needs, and will contribute to the urgently needed improved care of women with PPH in the future.