VOL. 16 | JANUARY 2025

UNITE GLOBE



United Efforts to Reduce Global Obstetric Hemorrhage



In the Spotlight

Research and Innovation

Check out new research published on page 2 and SMFM 2025 annual meeting highlights from last week on page 3 related to postpartum hemorrhage.







Find UNITE GLOBE on Social Media!

We have launched an X (previously known as Twitter) account for UNITE GLOBE (@uniteglobenow)! This account will supplement our quarterly meetings and newsletters by providing real-time updates regarding advancements in research, innovation, and advocacy related to obstetric hemorrhage prevention and management. Follow and share with your colleagues!

Overview

- Clinical Trials Updates
- New in Research and Innovation
- Advocacy & Education
- Upcoming Conferences and Meetings
- UNITE GLOBE Meeting Recap & Upcoming Events

Announcements

Conference 2024/2025 Highlights

The 2025 SMFM Pregnancy Meeting took place in January 27th - February 1st, 2025 in Denver, Colorado. SMFM meeting is a great opportunity to learn more about the latest research in Obstetrics. For more info click here.

The 2025 SOAP 57th Annual meeting is taking place April 30th - May 4th, 2025 in Portland, Oregon. The meeting will mainly focus on advancements in obstetric anesthesia. For more info click here.

UNITE GLOBE is an organization committed to delivering current cutting-edge advancements in research, innovation, and advocacy related to reducing postpartum hemorrhage- related maternal mortality and morbidity internationally to improve the lives of women and families worldwide.

Clinical Trials Update

OPTIMUM-OB TXA (NCT05370820)

• Current enrollment: 36 women (updated January 2025)

COPE

• 1693 - women randomized (updated January 2025)

New in Research and Innovation

Mandisa S et al. published, "Suction tube uterine tamponade versus uterine balloon tamponade for treatment of refractory postpartum hemorrhage: A randomized clinical feasibility trial" in International Journal of Gynecology and Obstetrics in January 2025 (link).

We enrolled 59 participants. The rate of the primary outcome (blood loss >1000 mL or laparotomy or death) was 8/27 (30%) in the STUT group versus 14/27 (52%) in the UBT group (risk ratio [RR] 0.56, 95% confidence interval [CI] 0.30-1.05, P = 0.07). Per protocol analysis was 7/26 (27%) versus 15/28 (54%) (RR 0.49, 95% CI 0.25-0.96, P = 0.04). Reporting severe pain during the procedures was less frequent in the STUT group (RR 0.46, 95% CI 0.25-0.86, P = 0.01). Most secondary outcomes favored the STUT group, with low certainty. STUT was experienced as less painful than UBT. Results were consistent with reported observational findings and one other randomized trial evidence of greater effectiveness for suction than balloon tamponade.

Shields L et al. published, "Effectiveness of the Intrauterine Balloon Tamponade Compared with an Intrauterine, Vacuum-Induced, Hemorrhage-Control Device for Postpartum Hemorrhage" online in Obstetrics and Gynecology in January 2025 (link).

During the 17-month observation period, there were 123,292 deliveries, and postpartum hemorrhage occurred in 5,931 (4.8%). Postpartum hemorrhage-control devices were used in 11.2% of cases (666 total, intrauterine balloon tamponade n=300, and vacuum-induced hemorrhage control n=366). For intrauterine balloon tamponade and vacuum-induced hemorrhage-control devices, quantitative blood loss (median and interquartile range) after device placement was similar at 194 (67–440) mL and 240 (113-528) mL (P=.40), respectively, as was the rate of any packed RBC transfusion (59.7% vs 50.0%, P=.08), transfusion of 3 packed RBC units or more (27.0% vs 24.9%, P=.53), and device failure (7.7% vs 8.5%, P=.70). Placement of either device at a quantitative blood loss between 1,000 and 1,499 mL compared with 1,500 mL or more resulted in significantly lower rates of packed RBC transfusion (39.1% vs 70.3%, P<.001), transfusion of 3 or more packed RBC units (13.7 vs 38.1%, P<.001), and device failure (3.4% vs 12.9%, P<.001). Transfusion and blood loss after device placement were similar with both hemorrhage-control devices. Earlier hemorrhage-control device placement reduced device failure and the need for transfusion.

<u>I'M WOMAN Trial (NCT05562609)</u>

• Current enrollment. 6,541 women

TRAAPrevia

 Current status: recruiting; Enrolled 930 women (updated January 2025)

Want your trial to be featured in our newsletter? Email uniteglobenow@gmail.com and tell us about your study!

Yunas et al. published "Tests for diagnosis of postpartum haemorrhage at vaginal birth" in Cochrane in January 2025 (link).

Visual estimation of blood loss to diagnose PPH showed low sensitivity and is likely to miss the diagnosis in half of women giving birth vaginally. A diagnostic approach using a calibrated drape to objectively measure blood loss plus clinical observations showed high sensitivity and specificity for diagnosing PPH. Other index tests showed low to moderate sensitivities in diagnosing PPH and severe PPH. Future research should determine the accuracy of diagnostic tests in non-hospital settings and consider combining index tests to increase the sensitivity of PPH diagnosis.

Dogru et al. published, "Artificial Intelligence in Predicting Postpartum Hemorrhage in Twin Pregnancies Undergoing Cesarean Section" in Cambridge University Press in January 2025 (link).

This study aimed to create a risk prediction model with artificial intelligence (AI) to identify patients at higher risk of postpartum hemorrhage using perinatal characteristics that may be associated with later postpartum hemorrhage (PPH) in twin pregnancies that underwent cesarean section. The study was planned as a retrospective cohort study at University Hospital. All twin cesarean deliveries were categorized into two groups: those with and without PPH. Using the perinatal characteristics of the cases, four different machine learning classifiers were created: Logistic regression (LR), support vector machine (SVM), random forest (RF), and multilayer perceptron (MLP). LR, RF, and SVM models were created a second time by including class weights to manage the underlying imbalances in the data. A total of 615 twin pregnancies were included in the study. There were 150 twin pregnancies with PPH and 465 without PPH. Dichorionity, PAS, and placenta previa were significantly higher in the PPHpositive group (p = .045, p = .004, p = .001 respectively). In our model, LR with class weight was the best model with the highest negative predictive value. The AUC in our LR with class weight model was %75.12 with an accuracy of 70.73%, a PPV of 47.92%, and an NPV of 85.33% in our data. Although the application of machine learning to create predictive models using clinical risk factors and our model's 70% accuracy rate are encouraging, it is not sufficient. Machine learning modeling needs further study and validation before being incorporated into clinical use.

Advocacy and Education



NIH announces winners of prize competition to improve postpartum maternal health and health equity through innovative diagnostics. Click here for more information.

SMFM Highlights

Posters

Click the titles for more information

- Keep Transfusing Until the Bleeding Stops"-Massive Transfusion and Circulatory Overload in Obstetric Hemorrhage
- Large Study Finds IV Iron
 Treatment During Pregnancy
 Safe and Effective for Anemia
- Should Tranexamic Acid be Re-dosed for Patients with Postpartum Hemorrhage Based on Volume of Blood Loss?

Orals

Click the titles for more information

- Intravenous Ferumoxytol versus Oral Ferrous Sulfate for Iron-Deficiency Anemia in Pregnancy: A Randomized Controlled

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- Intramuscular methylergonovine to decrease blood loss during cesarean delivery for twins: A triple-blinded placebocontrolled randomized trial

Upcoming Conferences and Meetings

Click on the Conferences for More Information:

- <u>SMFM Annual:</u> Jan 2025
- SOAP: April 2025
- ACOG: May 2025
- ISTH: June 2025
- COGI: Nov 2025



Society for Maternal-Fetal Medicine



Congress of the International Society on Thrombosis and Haemostasis



ACOG Annual Clinical and Scientific meeting



International Congress on Controversies in Obstetrics, Gynecology, and Infertility



Society for Obstetric Anesthesia and Perinatology Annual Meeting



Foundation for Women & Girls with Blood Disorders



Missed our January 2025 meeting? Watch a recording of it <u>here</u>.

January Speaker Contact Information:

Professor Ian Roberts; ian.roberts@lshtm.ac.uk

Our next meeting will be on **April 28th, 2025** at 10am EDT/ 3pm BST. Attend via Zoom using this link.