Low cost, easy to administer drug may be the key to preventing maternal deaths

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Postpartum hemorrhage (major blood loss after labor and birth) is the leading cause of maternal mortality worldwide, accounting for approximately one-quarter of all maternal deaths. In a study to be presented at the Society for Maternal-Fetal Medicine's (SMFM) annual meeting, The Pregnancy Meeting, researchers will unveil findings that demonstrate that tranexamic acid prevents blood loss after vaginal births and postpartum hemorrhage (PPH) among women who have an operative vaginal delivery (use of a vacuum or forceps) or an episiotomy. In the United States, about 3.1% of births occur via operative vaginal delivery and 11-12% of births include an episiotomy. These rates, however, vary between low, middle and high-income countries.

Tranexamic acid (TXA) has long been used to reduce bleeding in elective surgeries, trauma patients, and menstrual blood loss. More recently, TXA has been recommended for the treatment of PPH and studied for use following cesarean birth. However, until now, there were no methodically sound studies that demonstrated TXA could prevent PPH in vaginal births. The research presented today is part of the "TRAnexamic Acid for Preventing Postpartum Hemorrhage after Vaginal Delivery," more commonly referred to as the TRAAP Trial.

In multicenter, randomized control study in France, researchers gave nearly 4,000 women in labor either one gram of TXA or a placebo. In the group that received the TXA, there was a reduction in the incidence of postpartum blood loss. In sub-group analysis, the researchers found that TXA reduced PPH in women with instrumental vaginal delivery and episiotomy. Further, there was no increase in severe adverse events in the TXA group, including thrombotic events, as compared to the placebo group in the three months after delivery.

"TXA should be considered for women who deliver via operative vaginal delivery and episiotomy in conjunction with prophylactic oxytocin," said Loïc Sentilles, MD, Ph.D., lead author of the study and chair of the Department of Obstetrics and Gynecology at Bordeaux University Hospital. "At the dosage studied, the only side effect observed was an increase in nausea and vomiting."

There are certain risk factors that increase the likelihood of a woman experiencing PPH, including obesity, prolonged or augmented labor, previous cesarean birth, and others. However, more women with PPH have no identifiable risk factors. Therefore, it is therefore essential to prevent PPH and ultimately save women's lives.

Provided by Society for Maternal-Fetal Medicine