

Prevention of Postpartum Hemorrhage

Postpartum hemorrhage (PPH) remains a significant and preventable cause of maternal morbidity and mortality in both the developing and developed world. Coagulopathies associated with PPH differ from those associated with trauma and correction of any coagulopathy in addition to obstetric management has been known to improve outcomes. Coagulopathy may evolve rapidly and serial testing to assess trends is more useful than single measurements. Thrombelastography (TEG) provides a quick and effective method of whole blood coagulation monitoring when compared to traditional coagulation testing. Early identification of high risk patient population is very important in preventing PPH. In order to truly make an impact in decreasing PPH rates, it is essential to employ TEG for baseline third trimester coagulation status and monitor these trends during labor. Although TEG reference ranges are available for pregnant women through various trimesters, specific reference intervals should be established for each institution because of differences in laboratory methods and patient populations.

Our first goal is to collect third trimester TEG coagulation parameters and fibrinogen in pregnant women to establish local reference intervals. Secondly, these patients would be followed prospectively to the end of labor for PPH. With these data, we intend to create a logistic regression model that would help clinicians identify and predict PPH. Finally we would like to use these data to design a blood product administration algorithm to manage PPH and effectively improve patient care.

Applicant

Nichole L. LePage, MD
PGY-2 Pathology Resident Physician
Indiana University School of Medicine
350 W. 11th Street 4029-3 | Indianapolis, IN 46202
317.312.0624 (pager)
Email: nklandry@iupui.edu

Faculty Advisor

Esther Soundar, MD, MPH
Clinical Assistant Professor – Transfusion Medicine
Indiana University Health Pathology Laboratory
350 W. 11th Street Room 5006D | Indianapolis, IN 46202
317.491.6880 (office)
Email: esoundar@iuhealth.org, esoundar@iu.edu

Estimate of proposed total budget: \$5,000.00