

An Evaluation of Twin Pregnancies and Postpartum Hemorrhages

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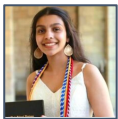
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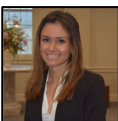
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1. INTRODUCTION

Childbirth may be accompanied by health risks such as the postpartum hemorrhage.³ Defined as the loss of more than 500 mL of blood after vaginal delivery or 1000 mL of blood after cesarean delivery, this condition can lead to fatal outcomes.¹ The placenta is attached to the uterine wall with blood vessels, and after delivery, the uterus contracts frequently to compress these vessels.¹ Previous research has found that up to 80% of postpartum hemorrhages are caused by the uterus not contracting enough to stop the bleeding, otherwise known as uterine atony.¹

di Marco and researchers aimed to study the operations and statistics of postpartum hemorrhages in patients with twin pregnancies at a tertiary level center of center in Rome over a five year period.² The researchers compared factors such as mode of delivery (cesarean vs vaginal), planned vs unplanned mode of delivery, episiotomy, neonatal weight, and preterm delivery. Episiotomy is a surgical cut at the vaginal opening made to help facilitate delivery of the baby.²



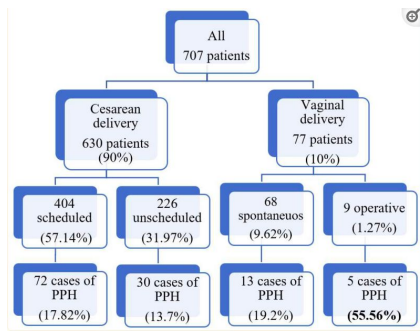
- * **WITHIN 24 HRS FOLLOWING DELIVERY**
- PRIMARY POSTPARTUM HEMORRHAGE
- * **LATER THAN 24 HRS**
- SECONDARY POSTPARTUM HEMORRHAGE



Postpartum hemorrhage visualization.⁴

2. PRIMARY FINDINGS

Of the 707 twin pregnancies delivered after 32 weeks, 120 had a postpartum hemorrhage.² Triplet pregnancies, women < 18 years of age, and women who did not sign the consent form were excluded from this sample. 630 of these deliveries were Cesarean deliveries.² Factors that were most significantly associated with this risk of PPH included episiotomy and neonatal weight.² The researchers also found that the risk of PPH may be associated significantly with the method of delivery, as 56% of patients with operative vaginal delivery had a PPH.²



Incidence of PPH and Mode of Delivery²

3. HOW THIS IMPACTS PATIENT CARE

This research can inform patient care due to its findings on maternal outcomes. Expecting mothers should be counseled on potential risks of PPH when having twin pregnancies. The descriptive statistics and results can be used to guide clinicians during pregnancies to be cognizant of risk factors and increase patient education. More research should be done on triplet pregnancies. As this paper studied one tertiary level center of care, additional research should be done to study which factors are significantly associated with PPH in other hospital settings based on demographics and location.

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Aditi graduated from the University of Maryland, College Park with degrees in Neurobiology and Psychology in 2022. She is currently working as a medical assistant at a dermatology practice and has been a volunteer with the Rape, Abuse, and Incest National Network since 2019. She joined RAP-EMCC in June 2021 and has worked on various retrospective studies since then. She currently serves as the head of the research committee. In her free time, Aditi enjoys reading, creative writing, and knitting.