Identifying Risk Factors of Severe Primary Post-Partum Hemorrhage

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Primary Postpartum hemorrhage (PPH) is one of the leading causes of major maternal mortality and morbidity. Severe cases of PPH can be associated with significant surgical intervention, blood transfusion, intensive care admission and death. Identifying risk factors for PPH is difficult as cases can still occur without obvious roots. Preventing Severe cases of PPH can be more challenging.

Objective: To explore the risk factors of severe PPH in our hospital. We aimed to address demographic factors, pregnancy related factors and labor characteristics.

Method: This is a retrospective case control study of severe PPH in the Obstetrics and Gynecology unit at Bahrain Defense Force Hospital, Teaching and Research Centre. We reviewed medical records of obstetric patients over a 24-month period. Demographic and obstetric risk factors were analyzed into two group of PPH≤ 1500ml and PPH > 1500 ml. The data were analyzed using StatDirect software. A P-value of less than 0.05 was considered statistically significant.

Results: We identified 71 cases of PPH with 13 cases in the severe category group. Severe PPH was more than doubled in cases with previous caesarean (54% vs 22%). There was no effect of maternal age, body mass index, previous medical history on severe cases of PPH. The two Polyhydramnios cases in the study ended in a severe PPH. There was no effect from any other pregnancy or labor characteristic on severe PPH rate.

Conclusion: Our analysis found previous caesarean birth and polyhydramnios as contributing risk factors for severe PPH.

Key words: Severe PPH, Maternal Morbidity, Maternal Mortality

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