

## Triggers for transfusion for vaginal and caesarean deliveries.

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**Introduction:** Blood products have become increasingly scarce and their harmful effects are often well overstressed. Inappropriate transfusions continue to occur, despite growing evidence<sup>1</sup> to the contrary. The purpose of the study was to identify trigger factors and appropriateness for transfusion after guidelines had been introduced.

**Methodology:** We carried out a retrospective audit for the period between Jan 2004 to April 2006. Data collected from the Blood bank records and the 103 patient notes (made available to us) were: mode of delivery, blood loss, intravenous fluids given, triggers for transfusion, place of transfusion and whether patients were symptomatic. (HR more than 100 and systolic BP less than 90mmHg.)

**Results:** Mean maternal age of the study group was 26.1. 38 women had Caesarean Section, 53 had vaginal delivery and 12 had instrumental delivery. We observed 30 patients(29.6%) had inappropriate transfusions (given less than 500 ml fluid prior to blood transfusion) and 43.7% of these were asymptomatic. Interestingly all these were vaginal deliveries where anaesthetists were not directly involved in their care.

### Triggers for transfusion:

Trigger factor	vaginal delivery		caesarean section	
	lab. suite	ward	lab. suite	ward
<b>Hb &lt; 7</b>				
Symptomatic	29	9	21	4
Asymptomatic	3	5	0	0
Ongoing bleed	-	-	-	-
<b>Hb &gt; 7</b>				
Symptomatic	4	5	0	2
Asymptomatic	5	3	8	2
Ongoing bleed	2	0	1	0

**Discussion:** Inappropriate transfusions continued to occur due to inadequate resuscitation prior to transfusion and not accepting Haemoglobin trigger threshold of less than 7mg/dl.

**Conclusion:** We conclude that review of parturient prior to transfusion, focussing on fluid resuscitation, accepting Hb < 7mg/dl as trigger for transfusion, compulsory auditing of transfusion practice, could reduce the incidence of transfusion.

### **References:**

1. Paul C Hebert et al. Variation in Red Cell Transfusion practice in Intensive care-a multi-centre cohort study. TRICC Trial Group. Critical Care1999; 3:57-63.