

Abstract

Objective To determine whether drainage of blood from the umbilical cord in the active management of the third stage affects peripartum change in haemoglobin, objectively measured blood loss, incidence of primary post partum haemorrhage, duration of the third stage and incidence of manual removal of placenta compared to non drainage.

Design Prospective randomised controlled trial.

Setting Professorial Obstetric Unit, De Soyza Hospital for Women, Colombo, Sri Lanka.

Population Women with singleton pregnancy achieving vaginal delivery after and throughout 37 weeks.

Methods Two hundred and thirty four eligible women were randomised to cord drainage (Group A) and non drainage (Group B) groups with active management of the third stage.

Main outcome measures Difference in haemoglobin drop measured 24 hours after delivery between the two groups, objectively measured blood loss, incidence of primary post partum haemorrhage, duration of the third stage and the incidence of manual removal of placenta.

Results There was a significantly higher drop in haemoglobin concentration in group A (1.3 ± 0.7 mg/dl) compared to group B (1.0 ± 0.6 mg/dl) ($p < 0.001$). Objectively measured

blood loss was higher in group A (222 ± 208 ml) compared to group B (141 ± 101 ml) ($p < 0.001$). Group A had a higher incidence of primary post partum haemorrhage (7.8%) compared to group B (1%) ($p < 0.05$). Although the duration of the third stage was longer in group A (1.2 ± 0.5 min) compared to group B (1.0 ± 0.4 min) ($p < 0.05$) there was no significant difference in the incidence of the manual removal of placenta.

Conclusions Drainage of blood from the umbilical cord as a part of the management of the third stage of labour increases the peripartum drop in haemoglobin, objectively measured blood loss, incidence of post partum haemorrhage and the duration of the third stage compared to non drainage. However it does not affect the incidence of manual removal of placenta.

Keywords Cord drainage, haemoglobin, blood loss, primary postpartum haemorrhage, manual removal of placenta, third stage of labour.