

Abstract

To Study the Role of Tranexamic Acid in Reducing Blood Loss during and After Caesarean Section in Sarawak General Hospital

Alifah Zizi¹, Shamsir Aris², HN Suharjono¹

¹Department of Obstetrics & Gynaecology, Sarawak General Hospital, Sarawak

²Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia (USIM), Kuala Lumpur

Objective:

To study the effectiveness of tranexamic acid in reducing blood loss during and after caesarean section in Sarawak General Hospital.

Methods:

A prospective, randomised, case-controlled clinical trial was conducted on 174 patients who underwent caesarean section. The study group, 93 patients received intravenous Tranexamic Acid 1g immediately before caesarean section whereas the control group, 81 patients did not receive any. Blood losses were measured in two periods; the intra-operative loss (from placental delivery to the end of caesarean section) and the post-operative loss (from the end of caesarean section to 6 hours post-partum). It was then compared between the two groups. Full blood count was tested 24 hours after caesarean section and compared between the two groups. Any adverse effects and complications during the study also evaluated.

Results:

Tranexamic acid significantly reduced the blood loss during and after caesarean section. Median blood loss was significantly less in the study group compared with control group in intra-operative loss (302.38 ml (202.85-501.19) vs 402.85ml (302.38-503.09)) and post-operative loss (150.00 ml (90.00-180.00) vs 180.00ml (150.00-270.00)) with $p=0.001$ respectively. Median haemoglobin level 24 hours post-operation was significantly greater in study group compared to control group (11.10g/dL (10.15-12.05) vs 11.00g/dL (9.60-11.90) with $p=0.02$. No complications or adverse effects of tranexamic acid were reported in both groups.

Conclusion:

Tranexamic acid can be use safely and effectively in women undergoing caesarean section.