



INCIDENCE, PROFILE AND OUTCOME OF PATIENTS WITH MASSIVE BLOOD TRANSFUSION IN A TERTIARY PEDIATRIC GOVERNMENT HOSPITAL IN THE PHILIPPINES

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INTRODUCTION

Massive blood transfusion (MBT) often occurs among trauma patients and are associated with high mortality rate. The use of massive transfusion protocol resulted in improved outcome among adult population however, massive transfusion protocol in our institution is not yet established.

This study describes the incidence, profile, and outcomes experienced by pediatric patients in a non-trauma setting who had massive blood transfusion.

METHODS

A retrospective cohort using blood bank and medical records of 33 patients who had massive blood transfusion from January 2018- June 2023.

RESULTS

- 33 patients had massive blood transfusion
- Complication rate did not differ significantly in those with high ratio versus low (78.3% vs 50.0%, $p=0.104$).
- Rate of mortality was lower in low transfusion ratio than with high ratio but was not significant. (20% vs 52%, $p=0.031$)

COMORBIDITIES	
Abdominal Tumors	33.3%
Gastrointestinal Disease	15.2%
CAUSES OF BLEEDING	
Surgical procedure	66.7%
Infection	12.1%
COMPLICATIONS	
Thrombocytopenia	51%
Prolonged PT/PTT	45%
Metabolic acidosis	42%
Hypocalcemia	42%
BLOOD PRODUCT TRANSFUSION RATIO	
High Blood Product Transfusion Ratio (Plasma: Prbc >1:1)	70%
Low Blood Product Transfusion Ratio (Plasma: Prbc <1:1)	30%

CONCLUSION

The incidence of massive blood transfusion (MBT) syndrome was very low (0.05%). The complications and mortality rates were not associated with the ratio of blood products transfused.

KEYWORDS Massive Blood Transfusion. Transfusion Ratio. Outcome.