IS PBM THE NEED OF TIME IN CURRENT ERA? - CTVS SURGERIES EXPERIENCE FROM A TERTIARY CARE HOSPITAL

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INTRODUCTION :

- Patient blood management (PBM) is a patient-focused, evidence-based and systemic approach to optimize the management of patients and transfusion of blood products for quality and effective patient care. [1]
- It is not blood in the blood center that is managed but the patient's own blood that is taken good care of and managed in accord with the physiology of blood management. This study is conducted to understand where PBM stands in this modern era with multiple available modalities in cardiac surgery. [2]

MATERIALS AND METHODS :

❑ The study was done from starting of July to end of September 2024. It is a retrospective observational study.

❑Data was collected and analysed from the Department of CTVS surgery and transfusion medicine, AIIMS Jodhpur. Lab results were collected from CDAC.

RESULTS :

❖Total number of surgeries conducted in 3 months were 132 out of which 57 (43.18%) were CABG.

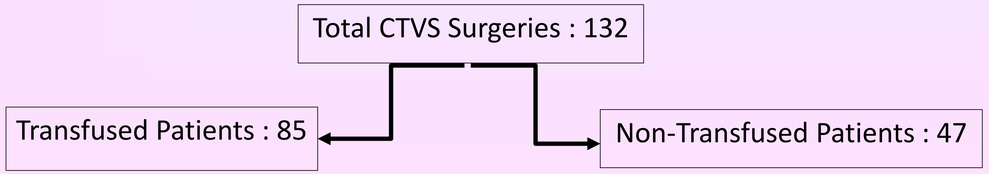
❖72 (55%) patients were allogeneically transfused.

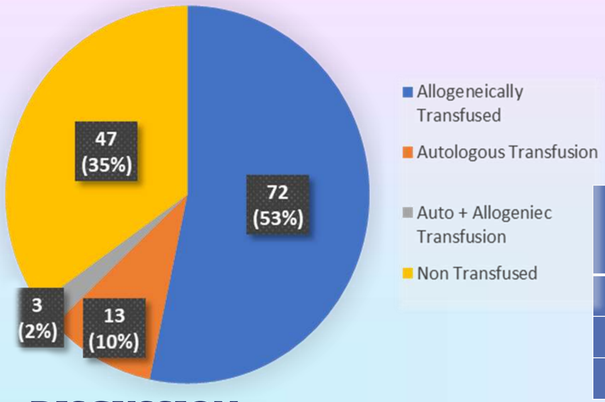
❖13 (9.85%) patients had autologous transfusion in form of ANVH out of which 3 (2.27%) patients had additional allogeneic transfusion.

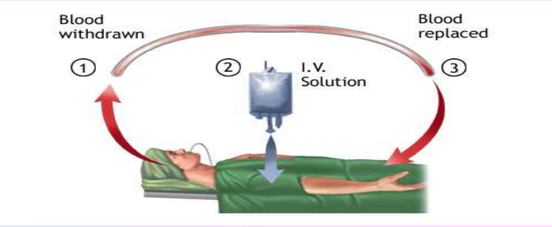
❖Pre-operative anemia incidence was 64.39%.

❖Patients undergoing on pump CABG required a greater number of transfusions compared to off pump CABG.

❖Transfusion probability was 85% and transfusion index was 1.8 suggesting significant blood utilization.







Hb (gm/dl)	No. of CABG Patients		Total
	On Pump	Off Pump	
<13	15	7	22
>13	9	1	10
Total	24	8	32

DISCUSSION :

❑ Predonation of autologous blood is an effective practice in order to reduce allogeneic blood transfusion with an acceptable cost in cardiac surgery

❑Pharmacologic methods of blood conservation such as high-dose aprotinin also reduce blood requirement by approximately 50%, showing good cost-effectiveness.

CONCLUSION :

✓ All efforts should therefore be made to detect and treat preoperative anemia and to prevent blood loss during and after surgery. Patients having preoperative anemia should be preferred for off pump CABG.

✓Even with the availability of drugs and biocompatible bypass machines, without basic correction of anemia will predispose patient to unnecessary transfusion and lower survival rates.

✓A reduction in the use of blood products will be the earliest and clearest result, and maybe the only one directly measurable in the short term.

REFERENCES :

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[3]Sedrakyan A, Treasure T, Elefteriades JA: Effect of aprotinin on clinical outcomes in coronary artery bypass graft surgery: A systematic AUTOLOGOUS BLOOD PREDONATION 595 review and meta-analysis of randomized clinical trials. J Thorac Cardiovasc Surg 128:442-448, 2004