

## EP-044 =“Assessment Of Transfusion Reaction To Fresh Frozen Plasma In Surgical Patients”

AUTHOR- DR.RAJEEV KUMAR, CO-AUTHOR PROF. TULIKA CHANDRA, DR. ARCHANA SOALANKI, DR ASHUTOSH SINGH

Dept. Of Transfusion medicine KGMU Lucknow

### Introduction

Fresh frozen plasma (FFP) is the fluid portion of a unit of whole blood frozen in a designated time frame, usually within 8 hours. Fresh frozen plasma contains all coagulation factors except platelets. Fresh frozen plasma contains fibrinogen, albumin, protein C, protein S, antithrombin, and tissue factor pathway inhibitors. The judicious use of FFP can significantly impact surgical outcomes, reducing intraoperative and postoperative complications associated with excessive bleeding. However, their administration is not without risks. The adverse effects of fresh frozen plasma administration are similar to those that pertain to whole blood and all blood components.

### Aims & Objectives

- 1.To assess the frequency and characteristics of transfusion reactions to FFP in surgical patients.
- 2.To assess the impact of standard transfusion practice in prevention of adverse transfusion reaction and clinical outcomes.

### Methodology

- 1.This prospective study was conducted at Department of Transfusion Medicine, KGMU in collaboration with surgical departments.
- 2.After receiving of request for FFP from surgical ,ABO Compatible Thawed FFP issued within 30 min to the surgical pt.
3. Issued time , transfusion time and total time of transfusion noted.
- 3.Detail of Transfusion reaction related to FFP transfusion noted .
- 4.Transfusion reaction analysed and classified accordingly.

Transfusion reaction workup-

1. Check for any clerical error
2. Checked for ABO compatibility
3. Visual inspection of FFP bag for any clot, leakage , discoloration , etc.
- 4.Imuunological workup done–
  - .Direct antiglobulin test
  - .Indirect antiglobulin test
  - . Auto control
  - .Minor cross matching
- 5 . Culture OF FFP bag .

### RESULTS:

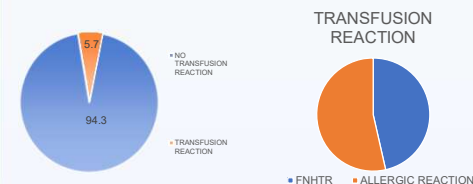
In this study 230 patients were included who were admitted in surgical departments for surgical procedure.

The adverse reaction rate during the transfusion was minimal, with 94.3% of patients reporting no reactions.

A small percentage experienced itching (3.%, 7 cases) , fever (2.6%, 5 cases), fever with chills experienced by 2 cases and fever with itching experienced by 1 cases .

No cases of TRALI and TACO were reported. The majority of reactions were managed with standard protocols, resulting in favourable patient outcomes.

| Sr.no. | Reaction type     | No. | percentage |
|--------|-------------------|-----|------------|
| 1.     | FNHTR             | 5   | 2.6%       |
| 2.     | ALLERGIC REACTION | 7   | 3%         |



### Conclusion

The incidence of transfusion reactions to FFP in surgical patients is relatively low, with allergic reactions being the most common. Awareness of potential risk factors can help optimize transfusion practices and improve patient management.

### REFERENCES

- 1.Suddock JT, Crookston KP. Transfusion Reactions. [Updated 2023 Aug 8]. In: StatPearls [Internet].
2. Delaney M, Wendel S, Bercovitz RS, Cid J, Cohn C, Dunbar NM, Apolseth TO, Popovsky M, Stanworth SJ, Timmouth A.; Biomedical Excellence for Safer Transfusion (BEST) Collaborative. Transfusion reactions: prevention, diagnosis, and treatment. Lancet. 2016