



*Approach of a Transfusion Medicine  
Specialist in Bridging the Disconnect  
with Clinicians*

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# Responsibilities

- Procurement of blood
- Solving Immunohaematological problems and transfusions of such patients
- Massive transfusions
- Administration of blood
- Transfusion reactions
  
- *To provide safe blood to patients*

# Scene so far .....

- Motivation of blood donors
- Donor retention
- Blood donor camps in liason with social workers
  
- *Procurement of blood donations*

- Component preparation
  - Component therapy
  - Quality control and assurance
  - Accreditation
  - TTI: improved tests and techniques
- 
- *laboratory aspects of transfusion medicine*

## *CONNECTING WITH CLINICIANS – BRIDGING THE GAP*



# Appropriate use of blood /rational use of blood

- One of the primary responsibilities of a specialist of TM
- How do do this :
- Lectures /seminars /CME s
- How may clincians attend these sessions ??

# Better way

- Prospective
- Discuss with the treating doctor about the indication of PRBC /thrombocytopenia/FFP
- Pathophysiology of anaemia /thrombocytopenia
- Transfusion triggers
- Possibility of transfusion masking underlying pathology (example of a patient with B12 deficiency)
- **One unit transfusion ???**

# Alternative and compatible blood transfusions

- Blood shortage : elective and emergency
- First in First out policy



## Choice of Alternate Blood Group for Transfusion

Sl. no	Patient's Blood Group	First choice of Blood Group	Second choice of Blood Group	Third choice of Blood Group
1.	O Positive	O Positive	O Negative	-
2	O Negative	O Negative	-	-
3	A Positive	A Positive	A Negative O Positive O Negative	-
4	A Negative	A Negative	O Negative	-
5	B Positive	B Positive	B Negative O Positive O Negative	-
6	B Negative	B Negative	O Negative	-
7	AB Positive	AB Positive	AB Negative A Positive A Negative B Positive B Negative O Positive O Negative	-
8	AB Negative	AB Negative	A Negative B Negative O Negative	-
9	Oh Bombay	Oh Bombay	-	-
10	A <sub>2</sub> Containing Anti- A <sub>1</sub>	A <sub>2</sub>	O Red cell	-
11	A <sub>2</sub> B Containing Anti- A <sub>1</sub>	A <sub>2</sub> B	A <sub>2</sub> or B Red Cells	O Red cell
Reference : - Transfusion Medicine Technical Manual by WHO, Edition 2003, page106				

# Transfusion committee

- Very imp member to voice concerns in blood transfusions
- Review transfusion practices
- MSBOS (maximum surgical blood order schedule )
- Consent for blood transfusions – validity
- To bring about in appropriate practices(eg discard of used bag in the wards)

# Immuno-hematological problems

- cell, and serum discrepancy
- Unexpected antibodies
- Patients with allo and auto antibodies
- Planning their transfusions

# HDN(Haemolytic Disease of Newborn )

- Antenatal detection of antibody –follow up with titres
- Clinical significance in causing hemolysis in the foetus
- Involvement in IUT
- Involvement in Exchange transfusions

# Audits of blood transfusions

- Retrospective /prospective audits :
- Request forms
- Indications

# Administration of blood

- Identification of patient with donor unit
- Documentation
- Time taken for blood transfusion
- Teaching nurses and doctors the dos and donts in a blood transfusion process

# Massive transfusions

- Blood banks are the first to be informed !
- Ratio of blood components to be given
- Medicolegal concerns of giving uncrossmatched blood

# Transfusion reactions

- Go and see the patient ! (rather than speaking over the phone )
- H/O previous blood transfusions
- What investigations need to be done
- Plan for future transfusions



# Point of care testing (TEG )

- For massive transfusions (liver surgeries ,cardic ,neuro etc)
- Interpretation of TEG
- Recommending appropriate transfusions

# Therapeutic procedures

- TPE –coordinating with ICUs recommending volume of replacement fluids
- Cryo poor plasma
- Red cell exchange
- Leukapheresis

# Granulocyte transfusions

- Neutropenic sepsis
- Coordinating with the hematologist ,collection of granulocytes and transfusions

# PBSC

- Harvest of PBSC auto/allogenic as the case may be
- Advise on blood transfusions if group mismatch transplant

# Autologous blood transfusions

- Pre deposit
- Intraoperative hemodilution

# Donor clinic ??

- Counselling /referring and follow up of sero reactive blood donors
- Donors developing IDA after blood donations

# Look back studies in patients

- Post transfusion look back studies – gives a huge scope to analyse blood safety – opening the door for improvements in the entire transfusion chain

# Take home message

- Ample ways to connect with clinicians
- Establish yourself as you are the master of “patient blood management ”
- Be a consultant’s consultant !





# Transfusion of Blood and Components

**Risks**

**Benefits**



***thank you***