

Complication's Incrossmatching in Blood Center

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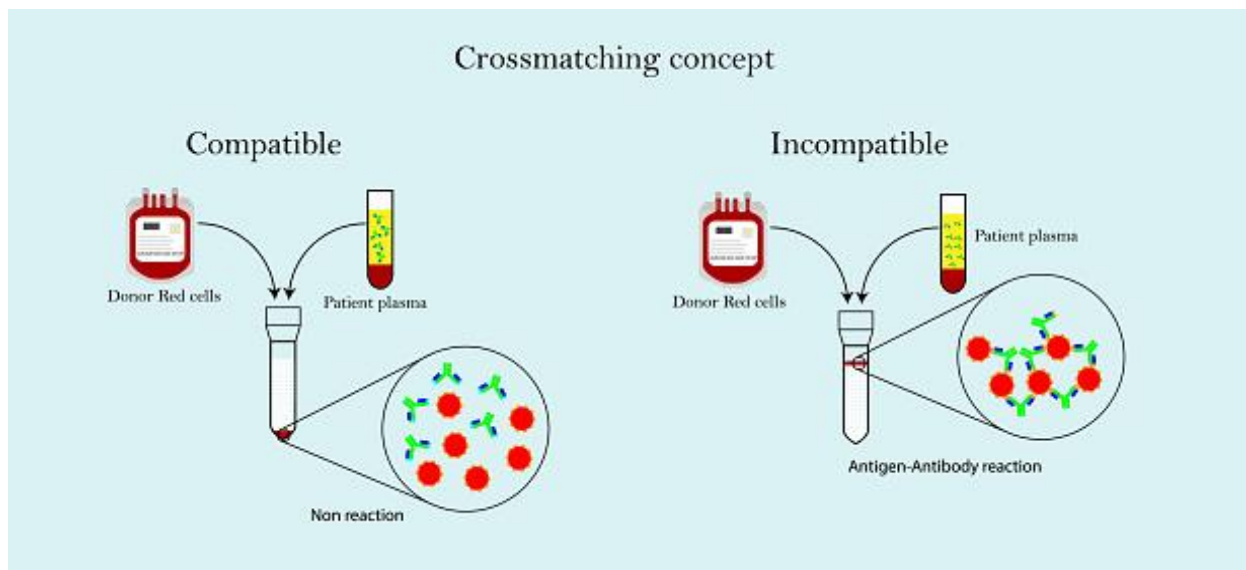
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Abstract:

A Crossmath is a Labrotory Test Used to Determine Compabilitybetween the Blood of a Donor & Blood of Patient. Whilecrossmatching is a Important Step during Safe Blood Transfusion.

TYPES OF CROSSMATCH :

1. Mannual Method
 - A. Tube Method
 - B. Slide Method
2. Gel Card



A Crossmath Is A Labrotory Test Used To Determine Compability Between The Blood Of A Donor & Blood Of Patient. While Crossmatching Is A Important Step During Safe Blood Transfusion.

POSITIVE CROSSMATCH : Blood from the donor and recipient are mixed. If the recipient's cells attack and kill the donor cells, the crossmatch is considered positive. This means **the recipient has antibodies "against" the donor's cells.**

NEGATIVE CROSSMATCH : If the crossmatch is negative **the pair is considered compatible.**

REQUIRED ITEM FOR CROSSMATCH :

1. Test Tube
2. Normal Saline

3. Pippet
4. Tips

PREPRATION OF CELL SUSPENSION

Add 5ul Cells In 50ul Normal Saline Spine The Tube At 2000rpm N Wash The Cell 3 Times. Cellsuspension Occure Tomato Red Colour.

TYPES OF CROSSMATCH IN DETAILS

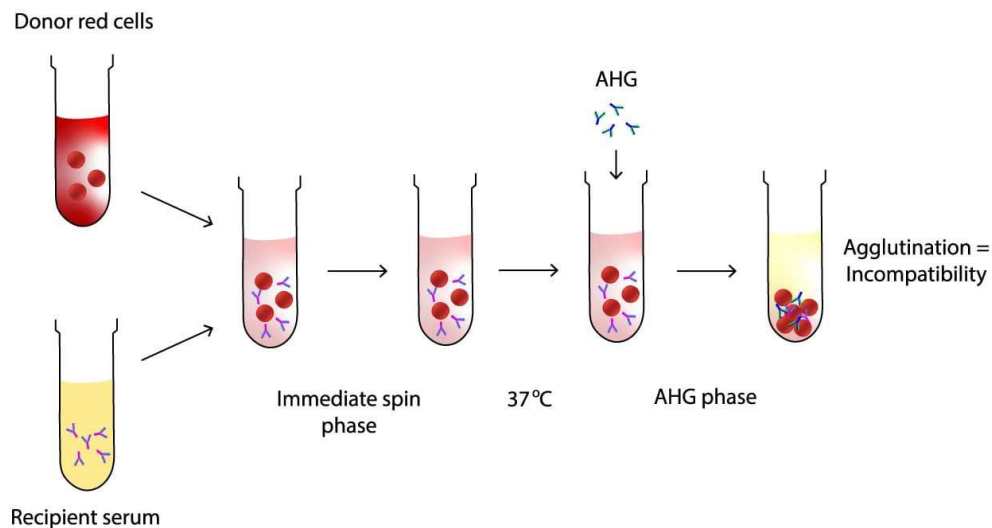
1. Mannual Method

A. Tube Method

In Tube Method Crossmatch Mainly Perform Major And Minior Test

Major Crossmatch : Patient Serume * Bag Cell

Minior Crossmatch : BAG SERUME * PATIENT CELL



B. Gel Card

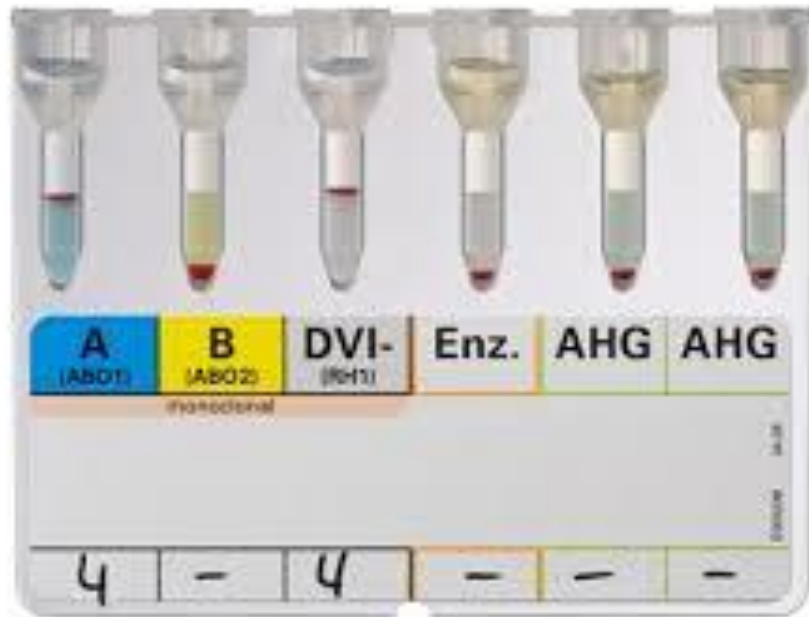
In Gel Card Cell Suspension Prepared By Using Lyse Solution

Cell Suspension By Lyse Solution

50 UI Lyse And 5 UI Blood Cell

Major Crossmatch : Patient Serume * Bag Cell

Minior Crossmatch : Bag Serume * Patient Cell



THERE ARE SEVERAL COMPLICATIONS THAT CAN HAPPEN

Pre Transfusion Complications

1. **Hemolysis** : Destruction Of Red Blood Cells Due To Incompability, Leading To Jaundice, Kidney Damage Or Even Death.
2. **Anaphylaxix** : Severe Allegic Reaction To Transfused Blood, Causing Symptoms And A Drop In Blood Presuure.
3. **Transfution- Related Acute Lung Injury (Trali)**: A Life Threatening Condition Causing Inflammation And Damage To The Lungs.

Labrotory Complications:

1. **False Positive** : In Correct Indentification Of An Incompatible Crossmatch, Leading To Unnecessary Delays Or Cancellation Of Transfution.
2. **False Negative** : Failure To Detect An Incompatible Crossmatch, Incresing The Risk Of Adverse Reaction.
3. **Technical Error** : Human Mistake (The Crossmatched Performed By Technician During The Crossmatched Labelling Of Sample Are Wrong/ Wrong Blood Group Bag Taken By Mistakely).

CLINICAL COMPLICATION:

1. **Delayed Hemolytic Transfusion Reaction (Dhtr)**: A Delayed Reaction To Transfused Blood, Causing Hemolysis, Jaundice, And Kidney Damage.
2. **Graft-Versus-Host Disease (Gvhd)**: A Rare But Potentially Life – Threatening Condition Occuring When Immune Cells In The Transfused Blood Attack The Patient Tissues.
3. **Transfusion- Associated Circulatory Overload (Taco)**: A Condition Causing Fluid Overload, Heart Failuer, And Respiratory Distress Due To Rapid Transfusion Of Blood Products.

THESE COMPLICATIONS ARE OCCUR IN CROSSMATCHING.**REFERENCE:**

1. Hematology And Blood Banking.
2. Meta Version Introduced By Whatsapp.
3. https://www.google.com/search?Sca_Esv=4e144505dd75033c&Sxsr=Adlywijunng1q4mbb86xsimxybbanprdla:1736517283278&Q=Crossmatch&Uds=Advngmjch0kdf7qgwtwtbrp0nt7dueltm8lelnklfawo1evzq2sqpie4-2rhv1e_Eo4jst_SpogzslndrbcmY2g5jz8expyk5ip5uemcuuqqiq63jppicso&Udm=2&Sa=X&Ved=2ahukewj9rmp-Puukaxuhslybhydx_4qkc0jegqicbab&Ictx=0&Cshid=1736517410151603&Biw=1366&Bih=593&Dpr=1#Vhid=-Axnkzsc1g14om&Vssid=Mosaic
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