

Urticarial reactions



- ❖ **Are characterized** by erythema, hives and itching without fever.
- ❖ This is a relatively common reaction and occurs in about 1% of all transfusions.
- ❖ It is thought to be **due to sensitization against plasma proteins.**
- ❖ The use of packed red blood cells rather than whole blood has decreased the likelihood of this problem.
- ❖ **Treatment** is with antihistamines & cortisol for symptomatic relief. & stop transfusion in severe cases .

How to Treat and Manage **URTICARIA** (HIVES)



Cold Compress

Wrap some ice cubes in a thin cloth and place it on the affected area for 5 to 10 minutes. Repeat a few times a day.



Baking Soda



Oatmeal



Aloe Vera



Apple Cider Vinegar



Add 1 to 2 cups of raw, unfiltered apple cider vinegar to a bathtub filled with warm water. Soak in it for 15 to 20 minutes once a day.

ADDITIONAL TIPS

- You can take over-the-counter or prescribed antihistamines to treat this problem.
- Identify your triggers and try to avoid them.
- Avoid harsh soaps and other chemicals that can worsen your skin condition.
- Constant pressure may worsen your condition, so wear loose-fitting clothes.



B

Nonhemolytic complication

Pyrogenic reactions

Urticarial reactions

Anaphylactic reactions

pulmonary edema

Graft versus Host disease

Immune suppression

Post-transfusion purpura

Anaphylactic reactions



- Severe form of urticarial reaction .
- These are severe reactions that can occur with very small amounts of blood (a few milliliters).
- **Abs in recipient react with protein in donor plasma**
- Treatment is with stop transfusion, epinephrine, fluids, corticosteroids and supportive measures.





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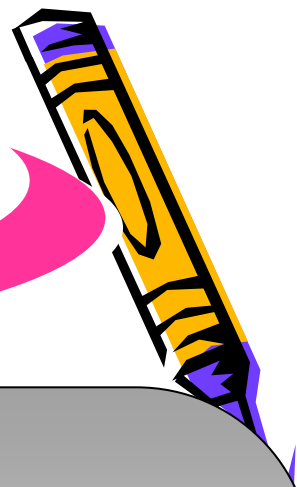
Graft versus Host disease

Immune suppression

Post-transfusion purpura



pulmonary edema



- Transfusion related acute lung injury
- TRALI
- Due to incompatibility between donor Ab and recipient granulocyte
- Present with a picture that looks like adult respiratory distress .





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- It is seen exclusively in immunocompromised patients where cellular blood products containing lymphocytes are given.
- These lymphocytes can mount an immune response against the compromised recipient.
- Irradiation of transfusions can be utilized to inactivate the lymphocytes prior to transfusion.



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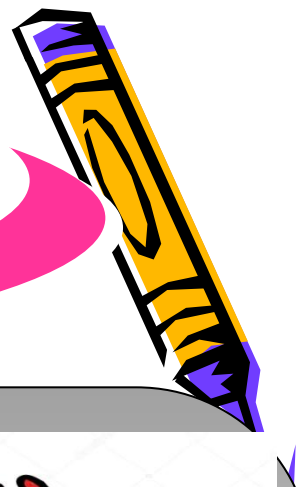
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Immune suppression



It is a debatable complication. The transfusion of leukocyte-containing blood products appears to be immunosuppressive causing a decrease in Natural Killer cell function, decreased phagocytosis and decreased helper to suppressor cell ratios.





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Post-transfusion purpura

- ✓ It is common with the development of **platelet antibodies**.
- ✓ The external purpura signal a reaction that may lead to profound thrombocytopenia which usually occurs about **one week post transfusion**.
- ✓ **Plasmapheresis** is the recommended treatment.





3- Complication of blood transfusion



Non immune complication



Immune complication

Non immune complication



1

Bacterial contamination reactions.

2

Circulatory overload.

3

Transfusion haemosiderosis

4

Complications of massive transfusion

5

Non immune hemolytic reaction

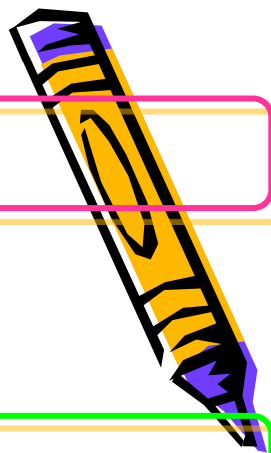
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Disease transmission



7

Citrate intoxication



8

Complication due to transfusion of stored blood.

9

Thrombophlebitis at site of cannula .

10

Air embolism.

