Abstract

Although blood transfusion saves lives and reduces morbidity in many clinical diseases and conditions, it is associated with certain risks A transfusion-related adverse event, also called transfusion reaction, In general, transfusion-related adverse events are categorized as infectious and noninfectious.

Infectious Risks of Transfusion The risk of transmission of infectious diseases through transfusion including viruses, bacteria, and parasites, Infectious agents may be classified into five categories based on transmissibility through transfusion, pathogenicity of the agent, availability of donor serologic test, and effectiveness of pathogen inactivation.

However, there are other classifications in the literature based on time of occurrence (i.e. acute versus delayed) or physiological mechanism (i.e. immune mediated versus no immune mediated)
Acute adverse event is defined as any unfavorable event occurring in apatient during or within 24 hours after transfusion.

Delayed adverse event is defined as any unfavorable event occurring in a patient more than 24 hours and up to 3 months after transfusion.

Acute immune mediated reactions include e.g acute hemolytic transfusion reaction (AHTR) . transfusion-related acute lung injury (TRALI**).**

Delayed immune mediated reactions e.g delayed hemolytic transfusion reaction (DHTR) and transfusion associated graft-versus-host disease (TA-GVHD).

No immune mediated transfusion reactions. These include hemoglobinuria, hyperkalemia, hypocalcemia, hypothermia, and iron overload**.**

Key words: blood transfusion, Infectious, immune, reactions and nonimmune