

Recent Guidelines for Blood and Blood Products Transfusion in Children

Essay

Submitted for partial fulfillment of master degree
in Pediatrics

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List of Abbreviation

| | |
|--------------------|--|
| µg | : Microgram |
| µmol | : Micromole |
| °C | : Celsius |
| °F | : Fahrenheit |
| 2,3-DPG | : 2,3-diphosphoglycerate |
| AABB | : American association of blood banks |
| ABD | : Apnea, bradycardia, desaturations |
| ACS | : Acute chest syndrome |
| AHF | : Antihemophilic factor |
| AHTRs | : Acute hemolytic transfusion reactions |
| AIHA | : Autoimmune hemolytic anemia |
| AML | : Acute myeloid leukemia |
| ANH | : Acute normovolemic hemodilution |
| Anti-HBc | : Hepatitis B core antibody |
| Anti-HPA-1a | : Anti-human platelet antigen-1a |
| Anti-HPA-5b | : Anti-human platelet antigen-5b |
| aPCCs | : Activated prothrombin complex concentrates |
| APR | : Aprotinin |
| APTT | : Activated partial thromboplastin time |
| ATR | : Acute transfusion reaction |
| B/A | : Bilirubin\Albumin |
| BCSH | : British committee for standards in haematology |
| BM | : Bone marrow |
| BMT | : Bone marrow transplant |

| | |
|--------------|---|
| BSA | : Body surface area |
| BSE | : Bovine spongiform encephalopathy |
| C4 | : Complement 4 |
| CAS | : cold agglutinin syndrome |
| CCI | : Corrected count increment |
| cGy | : Centigray |
| CIDP | : Chronic inflammatory demyelinating polyneuropathy |
| CJD | : Creutzfeldt-Jakob disease |
| CLIAs | : Chemiluminescent immunoassays |
| CMV | : Cytomegalovirus |
| COX-1 | : Cyclooxygenase-1 |
| CPAP | : Continuous positive airways pressure |
| CPD | : Citrate phosphate dextrose |
| CPDA | : Citrate Phosphate Dextrose Adenine |
| DAT | : Direct antiglobulin test |
| DDAVP | : 1-deamino-8-D-arginine vasopressin, desmopressin |
| DFP | : Deferiprone |
| DFX | : Deferasirox |
| DH | : Deliberate hypotension |
| DHTRs | : Delayed hemolytic transfusion reactions |
| DIC | : Disseminated intravascular coagulation |
| dl | : Deciliter |
| DNA | : Deoxy-ribonucleic acid |
| EACA | : Epsilon-amino-caproic acid |
| EBV | : Epstein-Barr virus |
| EBV | : Estimated blood volume |

| | |
|------------------------|--|
| ECMO | : Extracorporeal membrane oxygenation |
| EDTA | : Ethylene-diamine-tetraacetic acid |
| EIAs | : Enzyme immunoassays |
| EPO | : Recombinant human erythropoietin |
| ET | : Exchange transfusion |
| FDA | : Food and drug |
| FEIBA | : Factor eight inhibitor bypassing activity |
| FFP | : Fresh frozen plasma |
| FiO₂ | : Fractional inspired oxygen |
| FIX | : Factor nine |
| FNHTR | : Febrile nonhemolytic transfusion reaction |
| FNHTRs | : Febrile non-haemolytic transfusion reactions |
| FP24 | : Plasma frozen within 24 hours |
| FV | : Factor five |
| FVIII | : Factor eight |
| FXa | : Activated factor X |
| FXI | : Factor eleven |
| G6PD | : Glucose 6- phosphate dehydrogenase |
| G-CSF | : Granulocyte colony-stimulating factor |
| gm | : Gram |
| GM-CSF | : Granulocyte-macrophage colony-stimulating factor |
| GVHD | : Graft versus host disease |
| Gy | : Gray |
| HA | : Hemagglutination |
| Hb | : Hemoglobin |
| HbA | : Hemoglobin A |

| | |
|--------------|---|
| HBIG | : Hepatitis B immune globulin |
| HbS | : Hemoglobin S |
| HBsAg | : Hepatitis B surface antigen |
| HBV | : Hepatitis B virus |
| HCT | : Hematocrit |
| HCV | : Hepatitis C virus |
| HDN | : Hemolytic disease of the newborn |
| HFC | : Human fibrinogen concentrate |
| HFV | : High frequency ventilation |
| HH | : Hypervolemic hemodilution |
| HIT | : Heparin-induced thrombocytopenia |
| HIV | : Human immunodeficiency virus |
| HLA | : Human leucocyte antigen |
| HNA | : Human neutrophil antigens |
| HNIG | : Human normal immunoglobulin |
| HPA | : Human platelet antigen |
| HRIG | : Human rabies immunoglobulin |
| HRS | : Hepatorenal syndrome |
| HSC | : Hematopoietic stem cell |
| HSCT | : Hematopoietic stem cell transplantation |
| HTLV | : Human T-cell lymphotropic virus |
| IAs | : Immunoassays |
| IAT | : Indirect antiglobulin test |
| ICH | : Intracranial hemorrhage |
| ICS | : Intraoperative cell salvage |
| ICUs | : Intensive care units |

| | |
|--------------|-------------------------------------|
| ID | : Identification document |
| IgA | : Immunoglobulin A |
| IgE | : Immunoglobulin E |
| IgG | : Immunoglobulin G |
| IgM | : Immunoglobulin M |
| IL-1 | : Interleukin-1 |
| IL-11 | : Interleukin-11 |
| IL-3 | : Interleukin-3 |
| IL-6 | : Interleukin-6 |
| IM | : Intramuscular |
| INR | : International normalized ratio |
| ITP | : Immune thrombocytopenic purpura |
| IU | : International unit |
| IUT | : Intrauterine transfusion |
| IV | : Intravenous |
| IVDA | : Intravenous drug abuse |
| IVH | : Intraventricular hemorrhage |
| IVIG | : Intravenous immunoglobulin |
| JVP | : Jugular venous pressure |
| Kg | : Kilogram |
| l | : liter |
| lb | : Bound |
| LDH | : Lactate dehydrogenase |
| LEMS | : Lambert-Eaton myasthenic syndrome |
| LR | : Leukoreduced |
| MAP | : Mean airway pressure |

| | |
|---------------|---|
| Max | : Maximum |
| MB | : Methylene blue |
| MB-FFP | : Methylene blue treated FFP |
| MDS | : Myelodysplastic syndrome |
| mEq | : Milli-equivalent |
| mg | : Milligram |
| mm/Hg | : Millimeter mercury |
| MSOF | : Multisystem organ failure |
| NAIT | : Neonatal alloimmune thrombocytopenia |
| NAT | : Nucleic acid amplification technology |
| NCPAP | : Nasal continuous positive airway pressure |
| NEC | : Necrotizing enterocolitis |
| NIRS | : Near infrared spectroscopy |
| NO | : Nitric oxide |
| OTC | : Over the counter |
| PA | : Particle agglutination |
| PAD | : Primary antibody deficiency |
| PBSC | : Peripheral blood stem cell |
| PCCs | : Prothrombin complex concentrates |
| PCS | : Postoperative cell salvage |
| PICC | : Peripherally inserted long central catheter |
| PICU | : Pediatric intensive care unit |
| PID | : Primary immune deficiency |
| PNH | : Paroxysmal nocturnal hemoglobinuria |
| PPCD | : Post-paracentesis circulatory dysfunction |
| PRBCs | : Packed red blood cells |

| | |
|-------------------------|--|
| PT | : Prothrombin time |
| PTP | : Post-transfusion purpura |
| RBCs | : Red blood cells |
| RDPs | : Random donor platelets (platelet concentrate) |
| Rh | : Rhesus |
| RhD | : Rhesus blood group, D antigen |
| rhG-CSF | : Recombinant human granulocyte colony-stimulating factor |
| rhGM-CSF | : Recombinant human granulocyte-macrophage colony-stimulating factor |
| RhIg | : Rhesus immunoglobulin |
| rHuEPO | : Recombinant human erythropoietin |
| RNA | : Ribonucleic acid |
| ROP | : Retinopathy of prematurity |
| RPR | : Rapid plasma reagin |
| RSV | : Respiratory syncytial virus |
| rVIIa | : Recombinant Factor VIIa |
| SAG-M | : Saline, adenine, glucose and mannitol |
| SBP | : Spontaneous bacterial peritonitis |
| SC | : Subcutaneous |
| SCD | : sickle cell disease |
| SCID | : Severe combined immunodeficiency |
| SCIG | : Subcutaneous immunoglobulin |
| ScvO₂ | : Central venous oxygen saturation |
| SD-FFP | : Solvent-detergent treated plasma |
| SDPs | : Single donor platelets (apheresis platelets) |

| | |
|---------------------------------|--|
| SHOT | : Serious hazards of transfusion |
| SPC | : Summary of product characteristics |
| sPO₂ | : Peripheral oxygen saturation |
| Spp | : Species |
| T_½ | : Half life |
| TACO | : Transfusion-associated circulatory overload |
| TAD | : Transfusion-associated dyspnea |
| TA-GVHD | : Transfusion associated graft versus host disease |
| TAHCA | : Transfusion-associated hyperkalemic cardiac arrest |
| TNF- α | : Tumor necrosis factor-alpha |
| TPE | : Therapeutic plasma exchange |
| TPHA | : Treponema pallidum hemagglutination assays |
| TPO | : Thrombopoietin |
| TRALI | : Transfusion related acute lung injury |
| TRIPICU | : Transfusion requirements in PICU |
| TSB | : Total serum bilirubin |
| TTI | : Transfusion transmitted infection |
| TTP | : Thrombotic thrombocytopenic purpura |
| TXA | : Tranexamic acid |
| UB | : unbound bilirubin |
| vCJD | : variant Creutzfeldt-Jakob disease |
| VDRL | : Venereal diseases research laboratory |
| VOC | : Vaso-occlusive crises |
| Vol | : Volume |
| vWD | : von Willebrand's disease |

| | |
|-------------|-----------------------------------|
| vWf | : von Willebrand's factor |
| VZIG | : Varicella-zoster immunoglobulin |
| WBCs | : White blood cells |
| WBD | : Whole blood-derived |
| WHO | : World health organization |

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Introduction
