# BLOOD TRANSFUSION REACTION BLOODBOOK.COM

-"Information for Life" -



THIS PAGE LISTS INFORMATION IN DETAIL ON BLOOD TRANSFUSION REACTION, A PREVENTABLE LIFE THREATENING CONDITION AND REACTION TO TRANSFUSION WITH THE WRONG BLOOD. TO HOME PAGE BOOKMARK US CLOSE WINDOW

**Call your doctor or 911 NOW** if you have symptoms of a Blood transfusion reaction during or after a transfusion. Do not wait, call immediately. **This is an emergency!** 

## Facts for Life...

First a story..... the headline reads: "Transfusion Errors in New York State: An Analysis of 10 Years' Experience" - (Linden JV, Wagner K, Voytovich AE and Sheehan J. Transfusion 2000; 40:1207-13)

"From 1990 through 1998, approximately 256 transfusion services [in New York State] reported incidents that resulted in administration of Blood of incorrect ABO or Rh group. Erroneous administration was observed for 1 of 19,000 red cell units administered. Forty nine percent of these events, including **testing of the wrong specimen**, **transcription errors** and **issuance of the wrong unit**, occurred in the Blood bank and 51 percent occurred outside the Blood bank, including **administration to the wrong recipient** (38%) and **phlebotomy errors** (13%). Many events (15%) involved **multiple errors**; the most common was failure to detect at the bedside that the incorrect unit had been issued. **The authors conclude that transfusion error continues to be a significant risk** and that most errors result from human actions, thus may be preventable."

Do we have your attention yet?

### **GENERAL INFORMATION**

A Blood transfusion reaction is defined as symptoms triggered by a Blood transfusion. Here we offer a more complete explanation. This is valuable information for anyone who is about to give or get Blood.

Body Parts Affected - Blood; Blood vessels; kidneys; heart; skin; central nervous system; lungs.

**Signs & Symptoms** - Chills and fever; backache or other aches and pains; hives and itching. In more serious situations, Blood cell destruction (hemolysis), causing shortness of breath, severe headache, chest or back pain and Blood in the urine.

**Causes of Reaction** - Transfusions of a different Blood type than that of the patient. This may occur from errors in matching Blood or from the use of incompletely matched Blood in an emergency.

**Risks of Reaction Increase** - With Blood transfusions in emergency situations, when careful and precise typing and matching of Blood may be bypassed; Blood transfusions from donors who carry infections; Multiple Blood transfusions; having an Rh negative mother.

**How to Prevent Blood Transfusion Reaction** - Blood banks and hospitals train staff and have safety procedures in place to prevent transfusion reaction. If you suspect a transfusion reaction, you must, at once, tell everyone that you see. A Blood transfusion reaction is an emergency of the highest order. Your body is programmed to be comfortable in the fact that the life sustaining Blood, that is naturally produced by the body from within, is perfectly pure and safe within itself. The human body has no mechanism to cope with this emergency.

Should this occur, the physician in charge of the facility in which you are having the reaction must be notified at once. If you have ever in your life screamed and raised a major fuss, now is the time to do so. The phrase 'scream bloody murder' comes to mind.

There are some precautionary measures:

- Let the physician and attending medical personnel know of any prior history of any response to transfusion,
- Use of diphenhydramine, which is an antihistamine, and acetaminophen prior to transfusion may prevent minor reactions,
- And of course, autologous Blood donation, that is, donating and storing your own Blood for use during surgery, if necessary. Transfusion with your own Blood is least likely to produce a reaction.

## Facts for Life...

There are some good reasons for a husband to not donate Blood to his wife during her **childbearing years**. During this time, a women who plans to become pregnant, receiving Blood from her husband may pose a small risk to the infants born of these pregnancies. If, after the Blood transfusion the woman develops an antibody to an antigen on the father's red Blood cells, and the subsequently born fetus inherits the father's red cell antigen, the antibody from the mother may enter the Bloodstream of the fetus causing destruction of fetal red Blood cells. This may cause serious anemia in the fetus and excessive jaundice in the infant after birth. This is a known major cause of brain damage. Special Blood transfusions, using selected red Blood cells that do not have the particular in-compatible and offending antigen, are available when this condition is pre-diagnosed. Of course, we suggest autologous Blood donation for the mother. However, for those mothers who are unable to make an autologous donation, the decision to select her husband as a donor should always take this risk under consideration, and specific consultation with your pediatrician on this subject is essential.

#### WHAT to EXPECT at TRANSFUSION TIME

**Diagnostic Measures** - Your own observation of symptoms; Medical history and physical exam by a doctor; Laboratory Blood tests to re-check compatibility and detect complications.

**Appropriate Health Care** - Treatment from a Physician; Hospitalization. Patients receiving transfusions are usually in a hospital or outpatient surgical facility, and reactions can be properly treated when they occur.

**Possible Complications** - Acute kidney failure; Anaphylaxis; Congestive heart failure from too rapid transfusion.

**Probable Outcome** - Most transfusion reactions, if stopped quickly enough, will gradually clear up. EVERY transfusion reaction is serious; some are fatal.

#### TREATMENT at TRANSFUSION TIME

**General Action** - If possible, be alert and aware when you go to your Blood transfusion; Stay awake and alert during the Blood transfusion, if possible, so that you can notify medical personnel immediately if symptoms occur; Double check charts and labels.... it is your money, your Blood, and after all it is your life!.

**Medication** - Your doctor may prescribe: Antihistamines to decrease hives and itching; Cortisone drugs to decrease the likelihood of acute kidney failure; Antihypertensives, if Blood pressure rises too high, or hypertensives, such as ephedrine or epinephrine, if Blood pressure drops too low.

Activity - Resume your normal activities as soon as symptoms improve after transfusion.

**Call Your Doctor** if you have symptoms of a Blood transfusion reaction during or after a transfusion. Call immediately. This is an emergency **•** 



Facts for Life...

"..... In the past, a person with blood type O negative blood was considered to be a universal donor. It meant his or her blood could be given to anyone, regardless of blood type, without causing a transfusion reaction. This is no longer a relevant concept because of a better understanding of the complex issues of immune reactions related to incompatible donor blood cells."

- Mayo Clinic HealthOasis - Ask a Physician 08/09/2000 [full text available HERE]

The second secon

View FDA Blood Transfusion Death Notification

We invite you to contribute to, and to participate in BloodBook.com. If you know of accurate and dependable information about Blood collection, transfusion, donation, safety, disease, or Blood storage, we invite you to let us know by sending an e-mail to the BloodBook.com Suggestion Box.

Thank you for visiting BloodBook.com.

Home || Privacy || Site Specs

Legal & Copyright © 2000-2005 BloodBook.com. All rights reserved worldwide. BloodBook.com is an independent commercial enterprise and maintains no relationship with any medical or civic institution. If you have questions or comments about this web site please e-mail: webmaster@bloodbook.com.

last updated 10/10/2005 bloodbook.com

Blood Transfusion Reaction - BloodBook, Blood Information for Life