RITN®
RADIATION INJURY TREATMENT NETWORK

Serving an essential role in the United States' radiological emergency response plan

On April 6, 2009 President Obama said

"In a strange turn of history, the threat of global nuclear war has gone down, but the risk of a nuclear attack has gone up… Black market trade in nuclear secrets and nuclear materials abound. The technology to build a bomb has spread."

(WSJ, North Korea Seeks Political Gain From Rocket Launch).

The Radiation Injury Treatment Network® (RITN) includes 57 bone marrow transplant centers, donor management centers and cord blood banks that are collectively preparing for the response to a mass casualty marrow toxic incident. Possible incidents include the detonation of an improvised nuclear device or widespread exposure to mustard gas.

Since its formal inception in 2006, RITN has developed treatment guidelines and standard operating procedures for centers involved in the response, solidified partnerships with governmental and nongovernmental organizations, and conducted annual exercises to being recognized by the federal government in recent publications.

Mission Statement:

The Radiation Injury Treatment Network (RITN) provides comprehensive evaluation and treatment for victims of radiation exposure or other marrow-toxic injuries. RITN is comprised of experts from actual treatment facilities with experience in treatment of immune compromised marrow.

RITN is a cooperative effort of the National Marrow Donor Program® (NMDP) and the American Society for Blood and Marrow Transplantation (ASBMT).

Recognized by the federal government as an Expert Referral Care provider in the publication Planning Guidance for Response to a Nuclear Detonation created by the Homeland Security Council Interagency Policy Coordination Subcommittee for Preparedness and Response to Radiological and Nuclear Threats.

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Hematology Physicians Preparing for a Mass Casualty Marrow Toxic Incident

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WHAT IS A MARROW TOXIC INCIDENT?

A Marrow Toxic Incident (MTI) is an event that results in the suppression of the hematopoietic (marrow) system. Exposure to significant amounts of Ionizing Radiation (2-9 Gy) or exposure to some chemicals (e.g. Mustard Gas a.k.a. Lewisite) can cause marrow suppression.

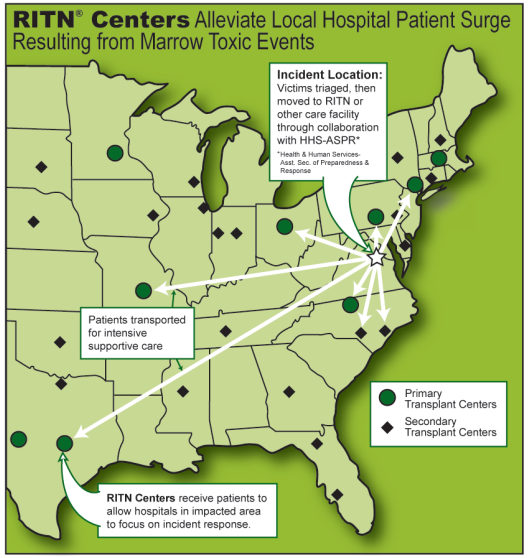
WHY IS PATIENT TREATMENT UNIQUE FOR A MTI?

Patients with a suppressed marrow function have a compromised autoimmune system which requires intensive supportive care that hematologists and their staff provide daily to their patients.

It is anticipated that very few victims would require a marrow transplant; the majority of victims would recover with proper care as defined in the RITN Treatment Guidelines.

PREPARATION ACTIVITIES

1) Development of admission and treatment guidelines
2) All participating centers have an emergency operations plan
3) Centers integrate with hospital and local emergency planners
4) Centers conduct an annual disaster response tabletop exercise
5) Education of health care professionals:
   a. Basic Radiation Training (over 1700 trained since 2006)
   b. Grand Rounds education of medical staff
6) Data collection elements are incorporated into the standard NMDP Data Collection Protocol
7) Emergency communications equipment distributed to all centers
8) Coordination with Department of Health and Human Services Assistant Secretary of Preparedness and Response (HHS-ASPR)
9) Coordination with international organizations
   a. European Group for Blood and Marrow Transplantation
   b. World Health Organization - Radiation Emergency Medical Preparedness and Assistance Network



WHAT CAN BE EXPECTED FROM RITN CENTERS?

1) Accept patient transfers to their institutions from the disaster area
2) Provide treatment expertise to practitioners caring for victims at other locations
3) Travel to other hospitals or treatment locations to provide medical expertise
4) Provide data on victims treated at their treatment facility

ADDITIONAL RESOURCES

1) Homeland Security Council Interagency Policy Coordination Subcommittee for Preparedness & Response to Radiological and Nuclear Threats (2009), Planning Guidance for Response to a Nuclear Detonation, Washington, D.C., Government Printing Office.
2) Fliedner TM, Chao NJ, Case C Jr, et al. Stem Cells, Multi-organ Failure in Radiation Emergency Medical Preparedness: A US/European Consultation Workshop. Stem Cells, pre-publication.
3) Weinstock DM, Case C Jr, Bader JL, et al. Radiological and nuclear events: contingency planning for hematologist/oncologists. Blood, June 15, 2008;111 (12):5440–5445.
4) D. M. Weinstock, C. Case Jr, and D. L. Confer. Response: Radiologic and nuclear events. Blood, June 15, 2008; 111(12): 5758 – 5759.

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