

accidents with overexposure of both workers and the population. The threat of nuclear terrorism with possible negative consequences for the population is real. Medical triage of exposed individuals by the extent of required medical aid is critical in large-scale radiation emergencies. Medical triage is based on the prediction of acute radiation consequences by estimated exposure dose. Whereas physical dosimetry, which provides more accurate dose estimates, often is not feasible in the event of large-scale radiation accidents, especially within the first hours and even days after exposure, biological dosimetry is of special value. Thus, a scale of Radiation Injury Severity Classification (RISC) has been developed based on the recently available medical data on 59 workers in Russia and two in the US, who were exposed due to the short-term acute irradiation.

The RISC scale includes clinical and hematological parameters for triage of acute radiation injuries into three prognostic categories: (1) survival probable; (2) survival possible; and (3) survival improbable. For *in-situ* testing of the RISC scale, 24 workers with the full clinical information for the first days after acute exposure have been selected. Eight physicians with limited training in assessment of radiation injuries have been recruited to test the scale. They have used the RISC scale to assign a numerical score to each of the 24 cases. Physicians have been able to classify appropriately 84% of cases. More importantly, they have correctly classified 96.8% of cases into a category of possible survival, i.e., those who would benefit of medical care. A more extensive *in-situ* testing is planned to validate these findings.

**Keywords:** prediction; Radiation Injury Severity Classification; severity

*Prehosp Disast Med* 2010;25(5):s94–s95

## 8<sup>th</sup> NATO Blood Conference

### The Blood Supply of Foreign Missions Army of the Czech Republic

Milos Bobonek, LtCol., MD, PhD;<sup>1</sup>  
Tatjana Markovina, WO, Bc<sup>2</sup>

1. Central Military Hospital Prague, Czech Republic
2. 7th Field Hospital Army of the Czech Republic

The residence of the Czech Armed Blood Transfusion Service is the Department of Hematology, Biochemistry and Blood Transfusion (DHBBT) in the Central Military Hospital in Prague. This facility is the blood collection, processing, and storage base for the military health service, and in special circumstances (frozen blood) also for civilians. The DHBBT is responsible for the blood supply of the foreign army missions as well as for blood transfusions in field hospitals.

The blood supply is based on regular delivery by aircraft every 4–5 weeks, one pack usually consists of 20 TU RBC and 20 TU FFP. The field military blood bank is part and parcel of laboratory of field hospital in container ISO-1C.

The Czech Army operated in numerous field foreign missions with field hospitals: 1994–1996 Croatia (Knin UNPROFOR), 1996–1998 Croatia (Klisa UNTAES), 1999 Albania (Kavaje AFOR), 1999 Turkey (earthquake, Gölcük), 2002 Afghanistan (Kabul, ISAF), 2007 Iraq (Basra, Enduring Freedom), 2007–2008 Afghanistan

(Kabul, ISAF). During missions, more than 1,600 TU red cells and 500 TU FFP was delivered these from DHBBT. Some situations were solved by blood collection in place of the operation.

The problems with aircraft delivery led to the decision to build-up the special blood bank container for field hospitals with frozen blood storage and to have the blood supply ensured in 3 components: (1) frozen blood components; (2) delivery of fresh blood (if available); (3) and blood collection in place of operation.

**Keywords:** blood supply; Czech Armed Blood Transfusion Service; field hospitals

*Prehosp Disast Med* 2010;25(5):s95

### Allergy Symptom Response Following Conversion from Injection Immunotherapy to Sublingual Immunotherapy

CDR Timothy Clenney, MD, MPH  
Naval Medical Center Portsmouth, Portsmouth, Virginia USA

**Background:** The objective of this research was to determine the clinical response to sublingual immunotherapy (SLIT) among patients with allergic rhinitis previously managed with injection immunotherapy (SCIT). Because deployed, active-duty military personnel often are prevented from using SCIT due to logistic and safety concerns, a secondary aim was to consider the appropriateness of SLIT in this group.

**Methods:** Questionnaires were offered to a sample of patients using SLIT during the period November 2009 to February 2009. The questionnaire assessed changes in nasal, eye, sleep, and constitutional symptoms following conversion to SLIT. Allergy-related quality of life was quantified using a validated instrument.

**Results:** Thirty patients (100%) agreed to participate. The average age was 48.6 years and 27.5% were military personnel. 100% with nasal symptoms reported improvement or no change following conversion to SLIT. Of those with eye symptoms, 97% were improved or unchanged. Sleep and constitutional symptoms were reported in 26 patients each. Improvement or no change was reported in 25 (96%;  $p < 0.001$ ) and 24 (93%;  $p < 0.006$ ). No adverse reactions were reported.

**Conclusions:** Allergy patients receiving SCIT can be converted to SLIT without loss of allergy symptom control. Because military personnel in this study were able to use SLIT in conjunction with their duties, larger studies are indicated to fully assess the potential role of SLIT in deployed military personnel.

**Keywords:** allergy; response; sublingual immunotherapy; symptom

*Prehosp Disast Med* 2010;25(5):s95

### The Use of Anthrax and Orthopox Therapeutic Antibodies from Human Origin in Biodefense

Cdr Dr Stef Stienstra

Royal Dutch Armed Forces, 1—CIMIC Bataljon

**Introduction:** It is impossible to protect whole nations from the effects of bioterrorism by preventive vaccination. There are too many possible agents, costs would be exorbitantly high, and the health risks associated with complex mass vaccination programs would be unacceptable. Adequate protection, however, could be provided via a combination of rapid