during its early stages of development Early diagnosis is necessary to begin early medical rehabilitation programs. The examination indicated a correlation between clinical symptoms and hormone level concentrations. An increasing concentration of melatonin forecasts of intensification of PTSD. In this connection, the efficiency of new diagnostic and treatment strategies for PTSD was evaluated with persons who suffered the consequences of Chernobyl.

Eighty-one participants in the Chernobyl event were examined. All of the patients were categorized into one of two groups. In the first group, generally accepted standards of diagnosis developed by American experts (DSM-III-R) were used. In the second group, the strategy "Perceptions radiation dangers" and special computer programs were used. Twenty-three percent of the participants were diagnosed with PTSD in the first group, and in the second group, 31.3% were diagnosed with PTSD.

The second aspect of this investigation was a study of the efficiency of the new programs for medical rehabilitation. Of principal importance is the need of complex influence on the background of known methods, such as psychotherapy and psychological help, and for the new methods of medical rehabilitation including an important role of the administration of different concentrations of oxygen, allowing reduction in activation of peroxidation and lipids, render decrease the effect that was confirmed by studying the concentrations of melatonin in the sick. The main intervention uses preparations that possess antioxidant and immunological activities. For the treatment of PTSD, we provided a combination of beta-carotene, vitamin E, and vitamin C.

This study demonstrated high effectiveness in the new diagnostics for the early diagnosis of patients with PTSD, as well as high efficacy of the individual programs for medical rehabilitation. The programs include new methods and can be recommended for broad introduction within the framework of patient care.

**Keywords**: anti-oxidants; beta-carotene; Chernobyl; diagnosis; diagnostics; melatonin; peroxidation; post-traumatic stress syndrome; rehabilitation; treatment; vitamin C; vitamin E; war

## G-102 Field Decontamination in the Mental Health Activity in the Community Disaster

Yoshiharu Kim

National Institute of Mental Health, National Center for Neurology and Psychiatry, Ichikawa, Chiba, Japan

The concept and activity of field decontamination has been adopted in the provision of emergency medical interventions at a chemically polluted site. Its purpose is to remove chemical stimulants from the site where the afflicted victims continue to be exposed.

A similar procedure is needed in the mental health activities in a massive disaster. In the disaster setting, decontamination means the separation of affected people from ongoing contact with the trauma-provoking stimuli or situation. This situation includes not only the

initial disastrous incident, but also various types of the secondary trauma. One typical example observed in the recent Wakayama arsenic case, was the stress caused by the unfavorable flood by the media that not only evoked the memory of the initial trauma, but stirred up the sense of "Haji", shame. Many of those afflicted became anxious due to the social stigma associated with the media report. Since the target of the media report was not each individual person, but at the afflicted community, it was necessary to provide a massive procedure to decontaminate the community in terms of the contact with the media. This decontamination procedure is the same as with other decontamination procedures in the sense that the injured people should be placed in a quiet and sanitary situation. A guideline to guarantee both the media activity and the [end]

Keywords: arsenic; decontamination; disaster; health, mental; media; psychological stress; psychosocial; shame; trauma

Special Lecture II SL-2 Methodology of Non-Traditional Triage Thursday, 14 May, 9:10–9:55 hours Chair: Yukihior Watoh

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Traditional triage methodology, as an essential element of disaster management and medicine, implies that personnel, equipment, standard procedures, evacuation, and echelons of care exist to support a system-wide management process. Non-traditional triage suggests that or the agents used to cause the disaster will compromise traditional triage categorization, personnel resources, and evacuation capabilities. In this decade, complex emergencies, and nuclear, chemical, biologic, and terrorist events and threats emphasize the need to readdress triage training and methodology. This lecture will outline those factors that influence triage methodology during the crisis and consequence management phases of non-traditional disasters.

Keywords: categorization; complex emergencies; disaster management; management; procedures; triage

Symposium III

## Global Concord for Mitigation of Acute Death Thursday, 14 May, 10:00-12:00 hours

Chair: Steven J. Rottman, Yasuhiro Yamamoto

## S3-3 Global Concord for Mitigatin of Acute Deaths in Japan

Hideaki Abe

Managing Director, Secretariat of Japan Disaster Relief