

Chinese Experience on Medical Response to Radiation Emergencies

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Abstract

Chinese Center for Medical Response to Radiation Emergency (CCMRRE) was established in 1992, based on the National Institute for Radiological Protection, China CDC (NIRP, China CDC). CCMRRE is a liaison of WHO/REMPAN and functions as a national and professional institute for medical preparedness and response to emergencies involving radioactive material. CCMRRE participates in drafting National Medical Assistant Program for Radiation Emergency and relevant technical documents, develops preventive measures and technique means of medical preparedness and response to radiation emergency. CCMRRE is responsible for medical response to radiological or nuclear accident on national level. CCMRRE holds training courses, organizes drills and provides technical support to local medical organizations in practicing medical preparedness and response to radiation emergency. CCMRRE collects, analyzes and exchanges information on medical response to radiological and nuclear emergency and establishes relevant database. CCMRRE also guides and participates in radiation pollution monitoring on accident sites.

In the past ten years, we accumulate much knowledge and experience on medical response to radiation emergencies. In this context, we will discuss Xinzhou Accident, which took place in 1992 and involved in three deaths, and Ha'erbin Accident that took place in 2005 and involved one death. A father and two brothers in Xinzhou Accident died of over-exposed to ^{60}Co source and misdiagnosis and improper treatment, which indicates that most general practitioners are uncertain about the health consequences of exposure to ionizing radiation and the medical management of exposed patients. When Ha'erbin Accident happened in 2005, the local hospital gave the right diagnosis and treatment based on the clinic symptoms and signs, which prevent more people suffering from over-expose to ^{192}Ir source. The distinct changes comes from the education and training to primary doctors related to early recognition of and medical response to radiation accidents. The changes show that the medical response and treatment capability in China are increased greatly.

Keywords: medical response, radiological accident, Xinzhou accident, Ha'erbin accident.

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