

colleague, and if appropriate, keeping them involved during the remainder of the incident. At the conclusion, a debriefing to cover functional aspects of their role may allow hitherto unrevealed facts to become shared knowledge. In disaster situations, these debriefings may need to continue over several weeks as different aspects of the event and its consequences become the focus of mental and physical needs. Finally, a thank you letter returns its own goodwill many times over, and, in a community affected by a disaster, also assists the individual to return to their normal psychological state and a normal life.

Reference

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Key words: disaster; infrastructure; management; Quarantelli; responses; salary; self-help; supervision; volunteers

Prehosp Disast Med 2001;16(2):s15.

Chemical Accidents in Urban Areas

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Industry commonly makes more than 70,000 different chemicals. Chemical accidents represent the loss of control of a toxic product. The consequences affect people, animals, and the environment; they often are serious, immediate or delayed, and sometimes unknown. A chemical accident in an urban environment is characterised by: (1) its suddenness of onset and the initial localisation (industrial sites, public highways, railroad lines and sometimes planes or pipelines); (2) the number of poisonings; (3) the uncertainty as to the nature and toxicity of the products; (4) the important influence of the weather, the geography and the urbanisation features; (5) the number of casualties; (6) the organised influx (by rescue teams) or uncoordinated influx (spontaneous arrivals) of casualties; (7) the repetitive injuries (inhalations, burns, blasts, ocular lesions, cutaneous cuts or irritations, etc.); (8) a poor and often insufficient sanitary organisation (lack of medical knowledge and culture concerning the chemical accident even in developed countries); (9) logistical and therapeutic constraints; (10) risks for the rescue teams; and (11) immediate emotional media repercussions. The alert usually is precocious, but often indistinct. The first medical team on the scene, headed by a responsible physician, settles itself in a place without risk. The first damage assessment allows the assessment of the needs and of the emergency actions needed to be put into place by the relevant authorities. The collaboration should be limited among the rescuers (fire brigade, emergency medical services, poison centre, police, authorities, company, experts, medical psychological emergency unit), each having a part, but all working together. The usual missions of the Emergency Medical Service simultaneously are adapted to the human and logistical constraints connected with the exceptional event. Taking charge of the victims on-site (selection, first medical aid, evacuation) is based on

the principles of emergency disasters, but a third level (potential emergency or victim who can present secondarily an acute and serious level of decompensation) is in addition to the two conventional emergency levels (absolute and relative levels). Equipped professionals must decontaminate each casualty before medical aid can be administered. Nevertheless, rescue teams should be protected to allow them to treat on-site. Everybody (patients of resuscitation, the injured, involved witnesses, rescuers) should be treated. The preparation of emergency rescue operations relies on the anticipation and evaluation of the potential industrial accidents in a region. Procedures taking account of risks and means (local chemical risks and local hospital structures) must be written and regularly updated. Real life exercises should be carried out. Finally, the information of the rescuers, patients, families, population and media should be clear, coherent, global, ethical, and not dramatised.

Key words: accidents; characteristics; chemicals; collaboration; control; exercises; information; levels; media; risks; toxicity; urban

Prehosp Disast Med 2001;16(2):15.

Clinical Analysis of 1,076 Cases of Abdominal Injury Bai Tie

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Objectives: To improve the level of early diagnosis and operating treatment of abdominal, multiple organ injuries.

Methods: A total of 1,076 patients with abdominal, multiple organ injuries were treated in our unit.

Results: The main causes of injuries were road traffic accidents, falls, and assaults. All Injury Severity Scores (ISS) of the patients were greater than 16; the highest ISS and the mean values for ISS were 60 and 29.5 respectively. Closed wounds were present in 893 cases, and open wounds in 183 cases. In this study, 969 cases underwent laparotomy. The main intraabdominal organ injuries included spleen, liver, kidney, stomach bowel, colon and rectum. A total of 990 cases (92%) survived, 96 cases (8.9%) had no detectable blood pressure on admission and were brought back to life, 17 cases (1.6%) were reoperated due to missed injuries or inadequate management at the initial operation. The mortality rate was 8.0% (86 patients) and most of the deaths were due to hemorrhagic shock.

Conclusions: Under urgent conditions, consuming diagnostic procedures are not allowed when a patient's hemodynamics is stable. Modern diagnostic techniques should be used to avoid polytrauma. Laparotomy should be performed actively, for prolonged contamination due to gastrointestinal rupture is more harmful than is a negative exploration. An operative principle is that saving life is primary and remaining organ function is secondary.

Key words: abdominal injury; demography; diagnosis; laparotomy; outcome; results; shock; surgery; therapy; trauma

Prehosp Disast Med 2001;16(2):s15.