

CRITICAL CARE AND SUPPORTIVE CARE IN THE MANAGEMENT OF POISONING

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Abstract

Introduction: Acute poisoning is a common emergency in Vietnam and accounts for from one fourth to one third of the number of patients at emergency departments and many of those require admission to intensive care units. Early assessment and diagnosis of poisoning conditions will help decrease their morbidity and mortality.

Specific measures: Effective treatment measures applied for poisoned patients include the followings:

Stabilization of vital functions, prevention of absorption of poisons, use of antidotes, enhanced elimination of poisons and prevention of complications. Although there have been many advances in these treatment methods, supportive and intensive care are still the mainstay and effective in majority of poisoning cases. The intensive and supportive measures are;

- Emergency treatment of disorders of vital functions, e.g. coma, seizure, hypoxia due to respiratory failure, hypotension and hypertension, cardiac arrhythmias, disorders of body temperature)
- Treatment of organ failure due to poisoning, e.g. hypoxia due to acute pulmonary edema, pneumonia due to lung aspiration, metabolic acidosis, septic shock, hepatic failure, renal failure,...

The identification of poisons and their toxicity and concentrations in the body as well as stages of poisoning is of importance. However, this work depends on variety of factors including time, laboratory facilities and especially the competency of the laboratory staff. The delayed admission and unclear history of exposure also challenge the laboratory diagnosis. Antidotes play important role in the treatment of certain poisonings but not all countries have regular and adequate and good manufacture or import of pharmaceuticals. Antidotes are usually expensive. Even in the ideal condition, the adequate supply of antidotes can not replace supportive and intensive care.

Most of the poisoned patients treated at intensive care units which are equipped with modern facilities and qualified treating staff. The application of continuous monitoring, supportive care with different measures, e.g. mechanical ventilation, vasopressors, renal replacement therapies,...in critically poisoned patients can be more effective compared with that in other intensive care patients.

Recommendation: Emergency departments and intensive care units need to have good and adequate equipment as well as nurses and physicians who are well-trained in the management of acute poisonings.