LETTER TO THE EDITOR

Reply to Letter to the Editor by Lonati and Locatelli - ‘Carbon Monoxide Poisoning in Children’

Dr. Lonati and colleagues pointed out the potential role of hydrogen cyanide in fire smoke inhalation.1 Cyanide poisoning has been related to cause mortality and morbidity in a fire-ground environment.2 However, the assessment of blood cyanide concentrations in fire victims has potential error because the toxic effects of cyanide on fire victims cannot be evaluated based solely on the concentration in blood. Since cyanide can be both produced and degraded in blood and tissue, interpreting blood levels can be difficult.3 In the review of Barillo and others,4 detoxification of cyanide can occur without specific antidotes with the use of aggressive supportive care. They suggested that specific assay and treatment for cyanide poisoning is rarely necessary in the treatment of victims of smoke and fire. In our series, more patients (n = 22) were exposed to a non-fire-related situation and only eight patients were exposed to a house fire.5 Only a few of our patients had their cyanide levels checked, but no abnormal findings were discovered. In the discussion section, we mentioned that the worse outcome of the house fire exposure group may be contributed to associated burns, lung inhalation injury, and exposure to other toxic gases in fire scene. Of course, hydrogen cyanide is an important toxic gas. We have cyanide antidote kits in our emergency department, but we do not have hydroxocobalamin. Although most of our patients have favorable prognoses, to save the lives of more fire victims as well as to decrease complications, we agree that checking serum cyanide and lactate levels and preparing newer and safer cyanide antidotes, e.g. hydroxocobalamin, may be helpful.

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References