CO-INGESTIONS WITH CARBON MONOXIDE

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Background: Intentional carbon monoxide (CO) poisoning is responsible for two-thirds of the deaths from CO poisoning in this country and an estimated 15,000 emergency department visits annually.

Objectives: In an attempt to optimize medical management of such patients, this study was conducted to examine the frequency and types of toxic co-ingestions that may accompany CO inhalation.

Methods: Records of all patients treated with hyperbaric oxygen for acute, intentional CO poisoning at a regional referral center for hyperbaric medicine in Seattle from 1980 to 2005 were reviewed. For those where co-ingestions were identified, information about type of poison(s) and results of toxicology screens was recorded and analyzed.

Results: Over the 25-year period examined, 433 patients were treated for intentional CO poisoning and records were available for 426. Of them, 188 (42%) had ingested one or more poisons in addition to CO. Ethanol was most common, but a wide variety of other drug classes were also identified. Toxicology screening studies of some type were performed in 49 patients.

Conclusions: Toxic co-ingestions appear to be relatively common in patients treated for intentional CO poisoning. Because of this, providers should be vigilant and open to clinical signs that can't be explained with CO exposure alone, and ready to treat clinical issues that arise from co-ingestions.