

patient with a COHb of 24.5% or higher experienced syncope. Lethargy was reported in 11 of 16 patients at a mean COHb of 25.9% and a threshold of 18.6%. Symptoms and COHb concentrations are presented in Table 2-6. All patients were successfully treated with hyperbaric oxygen. The authors provided the COHb measured after hospital admission but did not give any information on the delay between the end of exposure and measurement and on (probable) oxygen administration before hospital admission (e.g., oxygen by face mask during ambulance transport).

Patient followup using parental telephone interview and medical-record review 3-12 months after the poisoning was used to screen for neurologic sequelae. Three patients had developed problems: a [REDACTED] boy with 36.1% COHb had developed chronic headaches, a [REDACTED] girl with 36.9% COHb had developed memory difficulties after suffering a major motor seizure during the poisoning episode, and an [REDACTED] girl with 24.5% COHb developed poor school performance, which were attributed to her long-standing poor reading ability; psychological evaluation revealed no cognitive deficits. The former two children reported complete resolution of their symptoms 9 months after exposure.

Klees et al. (1985) investigated the neurotoxic sequelae of CO poisoning in children who had been brought to the emergency department of St. Pierre Hospital, Brussels, following CO poisoning (irrespective of whether they were subsequently hospitalized). Cases were only studied when followup was possible: in a short-term followup of 20 children who were submitted psychological tests at the time of the intoxication and who were re-examined about 3 months later, and in a long-term followup of 14 children who were re-examined 2-11 years after the intoxication. The authors listed the COHb measured after hospital admission, but did not give any information on the delay between the end of exposure and measurement, nor did they indicate a (probable) oxygen administration before hospital admission (e.g., oxygen by face mask during ambulance transport).

In the long-term followup, 6 of the 14 children (age 2.8-12.1 years at the time of intoxication; mean age of 7.8 years) exhibited serious disorders (spatial organization problems; constructive apraxia; or deterioration of lexical activity, as well as spelling and arithmetic); two of them had a previous history of psychological difficulties but displayed additional difficulties after the poisoning. COHb concentrations of 13% to 32% (mean 21%) have been reported for four of six children (no data on the other two children were available). Seven of the 14 children (ages of over 6 years, except for one 3.5-year-old child; mean age 9.8 years) exhibited slight impairment of visual memory and concentration; these children had COHb concentrations of 16% to 26% (mean 22%). One child of this group did not display any sequelae.

In the short-term followup, the authors grouped the 20 children according to age. In children below 3 years of age (six aged 2.0-2.9 years), medium intoxications (a COHb of 16-27% reported in five whose symptoms included loss of