TABLE 2-7 Severity of Carbon Monoxide Poisoning

Grade I (mild)	Headache, vomiting, tachycardia, no disturbances of consciousness
Grade II (moderate)	Disturbances or loss of consciousness without other neurologic symptoms, tachycardia, pain-induced reflexes still intact
Grade III (severe)	Loss of consciousness, intense muscular tonus, neurologic symptoms, tachycardia and tachypnea, circulatory and respiratory disturbances not observed
Grade IV (very severe)	Loss of consciousness, clinical signs of central nervous system damage, circulatory and respiratory disturbances

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TABLE 2-8 COHb, Exposure Duration, and Lactate Concentrations in Relation to Severity of Carbon Monoxide Poisoning

Parameter	Mild and Moderate Poisonings (no.)	Severe and Very Severe Poisonings (no.)	Very Severe Poisonings (no.)
COHb (%)	27 ± 12 (27)	34 ± 13 (11)	31 ± 14 (3)
Exposure duration (h)	4.6 ± 3.3 (27)	9.1 ± 3.5 (12)	10.3 ± 1.3 (4)
Blood lactate concentration (μmol/mL)[a]	4.1 ± 3.6 (27)	8.8 ± 3.1 (11)	11.0 ± 2.2 (3)

[a]Blood lactate concentrations in 12 control individuals was 1.4 ± 0.3 μmol/mL.
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poisonings, the lactic acid concentration in blood, as an indicator of metabolic acidosis, was significantly higher. For pyruvate and glucose concentrations, no significant differences were found (not shown).

Deschamps et al. (2003), in a prospective study, measured effects on memory 1 month after an acute CO intoxication. Of all patients examined in the hospital for suspicion of acute CO intoxication over 4 years (n 944), 230 patients fulfilled the inclusion criterion of a COHb level of 11% or higher in the first blood sample measured at the hospital. After applying further inclusion criteria, that is, ages between 18 and 60, fluent in the French language, no disease or risk factor that might impair memory (e.g., excessive alcohol consumption, treatment with psychotropic drugs, drug abuse, neurologic or psychiatric diseases, and exposure to solvents or heavy metals), 38 patients were suitable for inclusion, of which 32 were examined. The median COHb in the first blood sample was 23%. Median blood CO at the end of exposure was calculated as 30%. The median number of days between intoxication and psychometric testing was 31. Each patient was paired with a control with respect to gender, age, and educational