

Unusual Death Attributed to Combined Effects of Chloral Hydrate, Lidocaine, and Nitrous Oxide.

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Abstract

A case in which the death of a 2-year-old male child was the result of an acute intoxication with chloral hydrate, lidocaine, and nitrous oxide is presented. Trichloroethanol (TCE), the primary metabolite of chloral hydrate, was qualitatively detected by the Fujiwara reaction. Quantitation of TCE was carried out by gas chromatography–mass spectrometry (GC–MS) with the following results: plasma, 79.0 mg/L; urine, 31.0 mg/L; gastric contents, 454.0 mg/L; bile, 111.0 mg/L; vitreous, 40.2 mg/L; cerebrospinal fluid (CSF), 68.3 mg/L; and liver, 164 mg/kg. Lidocaine was quantitated by GC analysis using nitrogen-phosphorus detection with the following results: plasma, 11.9 mg/L; urine, 3.7 mg/L; gastric contents, 15.3 mg/L; bile, 19.0 mg/L; vitreous, 17.8 mg/L; CSF, 9.4 mg/L; and liver, 19.0 mg/kg. Nitrous oxide was quantitated in the blood with a value of 4.4 mL/L.