

CHLOROBUTANOL POISONING -- REPORT OF A SUICIDAL ATTEMPT

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Chlorobutanol intoxications are rare events since the substance was withdrawn as a major constituent of hypnotics and analgesics. Regarding the literature, it seems that only a minor source of predominantly cumulative toxicity is left by the adjuvant use of chlorobutanol (e.g., in a few eye- and eardrops, mouth-washes, cosmetics, and some injectables)¹. We now report the recent case of a 55 year old fisherman who coingested alcohol and 100 ml of a solution containing 78 % chlorobutanol. Such high concentrated formulations are provided for special purposes in fish farming still today. From our knowledge, there is no published report of a comparable high dose in acute chlorobutanol intoxication.

About 30 minutes after the ingestion, the patient was found by the emergency physician in deep comatose and cardiorespiratory insufficient state, requiring artificial ventilation and volume substitution. Gastric lavage and instillation of charcoal were performed after admission to hospital. Sufficient arterial pressure could be maintained by administration of dopamine only. Seizure episodes were controlled by diazepam. The blood ethanol concentration on admission was 2.4 g/l. Determination of chlorobutanol in body fluids could not be performed. An early haemodialysis was considered, but the required shifting by helicopter was delayed. Deep depression of central nervous activity, fixed pinpoint pupils, and muscular hypotonia did not change till haemodialysis was performed over 4 hours the next morning. During this and a second session on the following day, remarkable arousal reactions were noticed. The further course was complicated by a severe organic brain syndrome, also by continuous pulmonary insufficiency related to bilateral pulmonary infiltration and pre-existing emphysema. Assisted ventilation was maintained for 9 days. Later complications arose from anaemia and severe thrombocytopenia, considered to be allergic drug reactions (coincident rash on Rocephin®).

During the severe course of 6 weeks there has been only a slight and transient elevation of liver enzymes, no sign of coagulation factor disturbances and no sign of renal toxicity. The patient survived without sequelae. Further he underwent psychological treatment and alcohol withdrawal. Despite this, he died one year later from self-strangulation in another suicidal attempt.

Reference:

1. Nordt SP: Chlorobutanol toxicity.
The Annals of Pharmacotherapy 1996; 30(10):1179-1180