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(*Accepted 18 January 1978*)

SHORT REPORTS

Severe Dettol (chloroxylenol and terpineol) poisoning

Phenol poisoning is recognised as being serious, but chloroxylenol, a common constituent of proprietary disinfectants is regarded to be of low[1 2] to moderate[3] toxicity, and the Dettol label describes it as non-poisonous. Although reference is made to a personal communication about a patient who died of an air embolus after attempting to induce an abortion by instilling a chloroxylenol disinfectant into her uterus, we failed to find any reports of serious poisoning after oral ingestion of chloroxylenol. We report here such a case.

Case report

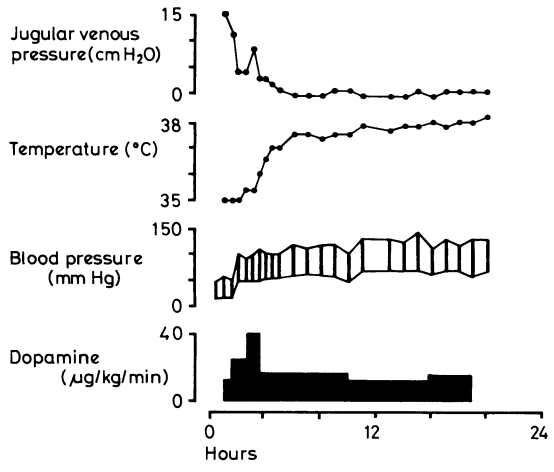
A 70-year-old depressed woman was admitted to the casualty department 30 minutes after attempting to commit suicide by ingesting 350 ml of household Dettol (Reckit and Colman), which contains chloroxylenol 48 g/l, terpineol, and ethyl alcohol (±7·0%).

She was in a deep coma, areflexic, and unresponsive to painful stimuli, and her pupils were moderately constricted showing little response to light. Her systolic blood pressure was 30 mm Hg, and her pulse 60 beats/min; she was breathing spontaneously at 8 per minute. Her rectal temperature was 35°C and she had signs of peripheral venous dilatation and a raised jugular venous pressure. There were no signs of corrosion or chemical irritation of the skin or mucosae and her ECG showed pronounced ischaemic changes.

An intravenous line was established, oxygen given via a face mask, and the stomach content carefully aspirated via a Ryles tube inserted through a nostril. The stomach content was milky and smelt strongly of Dettol. Careful gastric lavage was performed with small amounts of water, and afterwards 100 ml of liquid paraffin was left in the stomach. The patient was then transferred to the intensive care unit, where her vital functions were monitored continuously. Her blood pressure was controlled by dopamine infusion. About four hours after admission she developed a nodal tachycardia, which responded well to intravenous verapamil. After six to eight hours she started to regain consciousness and was fully conscious after 24 hours (see figure). She was then transferred to the general psychiatric ward and apart from severe watery diarrhoea during the first 48 hours recovered uneventfully.

Thin-layer chromatography of the gastric aspirate was compared with that of Dettol and its constituents and the presence of chloroxylenol and terpineol confirmed. Minute amounts of free chloroxylenol were present in the urine, but no chloroxylenol could be detected in the blood, although several phenolic compounds presumed to be metabolites and conjugation products were present. Large amounts of conjugated chloroxylenol were present in the urine.

Blood obtained on admission also showed an ethyl alcohol concentration of 700 mg/l and a sample of Dettol a concentration of 7·3%. Extensive gas-chromatography and thin-layer chromatography failed to show the presence of other potentially toxic substances.



Clinical course of patient during the first 24 hours.

Comment

This case has some interesting features. Apart from the rarity of the ingestion of such a large amount of this disinfectant (equivalent to 16·8 g of chloroxylenol), the rapidity of the development of profound central nervous system and cardiovascular depression and the remarkably rapid recovery are striking. The body seems to have very efficient mechanisms for rapidly detoxifying and eliminating chloroxylenol.

We thank the medical superintendent of the National Hospital, Bloemfontein, for permission to report this case.

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(*Accepted 23 November 1977*)

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Assessment of hypoproteinaemic oedema: a simple physical sign

It is well known that hypoproteinaemia can cause pitting oedema. We have found that hypoproteinaemic oedema pits and recovers differently from other types of oedema but can find no reference to this in reports or texts on physical signs. We therefore investigated the relation between the rate of recovery of pitting and the serum albumin concentration in a group of oedematous patients.

Patients, methods, and results

Over four months all patients coming to our notice who had had pitting leg oedema for less than three months were studied. Their oedema was