139 TALINOLOL POISONING

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Objective: Talinolol is a cardioselective beta blocker used in the management of hypertension and other cardiovascular disorders. Originally developed in the former GDR, even nowadays mainly it is prescribed in the eastern federal states of Germany. In adults the usual dosage form are tablets to 50 or 100 mg. The maximum dose is 300 mg per day orally. Case report: A 31-year-old female was admitted about 3 h after suicidal ingestion of 2 g talinolol. Initially gastric lavage was performed and activated charcoal was given. The patient becomes more and more somnolent, hypotensive (BP₂₀ 60 mmHg) and peripheral pulseless with weak spontaneous breathing. She was intubated intratracheally and artificial respiration was done. Despite giving high doses of epinephrine, dopamine, and glucagon (total dose 19 mg, 750 mg, 15 mg respectively), the blood pressure and heart rate decreased dramatically. Additionally high doses of dobutamin, methylprednisolone, sodium bicarbonate as well as crystalloid and colloidal solutions were infused. As it was impossible to stimulate the heart electrically with intensities up to 140 mA, diazepam (initially 1 mg/kg i.v. as bolus, then continuously 0.3 mg/kg/h, later reduced to 0.13 mg/kg/h) was administered. After 70 min extrathoracal cardiopulmonary resuscitation (heart massage) the patient's own heart action restored and could be stabilized under catecholamines and glucagon, which were reduced continuously over the next three days. The initial talinolol plasma level was 8.6 µg/ml (therapeutic range: 0.04-0.15 mg/ml; potentially lethal >5 µg/ml) and decreases to 0.08 µg/ml on day 4. Within 6 days the patient recovered with normal heart function but slight neurologic sequelae. Case series: 1994-1998 the Poisons Information Centre Erfurt 69 cases of talinolol poisoning were registered. In 42 cases (61%) a potential life-threatening dose (median 1500 mg; range 700-7500 mg; n 37) were ingested. The majority of these patients could be stabilized within 6 h after ingestion. One 22-year-old female died 4 h after ingestion of 7500 mg talinolol despite of all intensive care measures. The highest plasma level 33 µg/ml measured in this case series. Conclusion: There is maintained that talinolol have neither intrinsic sympathomimetic nor membrane-stabilizing activity. In contrast, in life-threatening poisoning often chloroquine-like cardiac effects were seen, especially resistance to adrenergic and electrical stimulation. We suggest that in such cases the early administration of diazepam could be useful. The positive influence of diazepam on the cardiac situation could be mediated through the peripheral-type benzodiazepine receptors.