## DIFFICULTIES IN BACLOFEN OVERDOSE

Kutz S (1), Deters M (1), Pfeiffer L (2), Hentschel H (1). 1. Poisons Information Centre, Erfurt, Germany; 2. Hospital Hufeland Klinikum Mühlhausen, Germany

Baclofen is a derivative of gamma aminobutyric acid (GABA) and acts specifically at the spinal end of the upper motor neurons to cause muscle relaxation. It is used in the treatment of intractable spasticity due to spinal cord injury, multiple sclerosis, cerebral palsy, and other spinal diseases. We report an illustrative case of baclofen overdose. Case report: A 49-year-old woman was found comatose at home. On site, drug ingestion was not suspected in the patient. Clinical findings were massive hypersalivation, miosis, bradycardia, and pronounced hypotonia. Initially, neither monosynaptic nor brainstem reflexes could be induced. Poisoning with clomethiazole, opioids or organophosphates was considered at the first consultation with the PIC. Later, myoclonia induced by tactile stimuli and questionable seizures were observed. Only taking a detailed collateral history revealed self-medication with baclofen because of myogelosis, where upon the clinical features of an overdose were checked at the second consultation with the PIC. The suspicion of baclofen poisoning was confirmed by the measured serum concentration of 3734 µg/L (toxic > 1000 µg/L), which decreased to 103 µg/L within 48 hours (calculated elimination half-life 9.3 h). Weaning was tried without success at sixth and eighth day after admission. At the ninth day, however, the patient was extubated successfully but showed symptoms of psycho-organic syndrome with psychomotor agitation, changing cooperativeness, and thought disorder. Therefore, after 19 days on ICU further treatment was necessary in a mental hospital. Conclusion: Symptoms of baclofen overdose may simulate severe cerebral disorders as well as other poisonings (1). Diagnosis, however, may be difficult if neither additional information nor the possibility of baclofen determination is available. CNS disturbances could persist much longer than would be suspected from the elimination half-life of baclofen. As sequelae hypoxia or seizureinduced brain syndromes may occur. References: 1. Ostermann ME, Young B, Sibbald WJ, Nicolle MW. Coma mimicking brain death following baclofen overdose. Intensive Care Med. 2000;26:1144-6.