Amlodipine. Collection and Analysis of Case Data in the Society of Clinical Toxicology of German Speaking Countries (GfKT).

Stedtler U (1), Behrens A (2), Gerber G (3) Hackl E (4), Hofmann-Walbeck P (5), Mathieu M, (6) Prasa D (7), Rauber-Lüthy C (8), Reinecke HJ (9), Seidel C (10)

1. Poison Information Center (PC) Freiburg, Germany, 2. PC Göttingen, Germany, 3. PC München, Germany 4. PC Wien, Austria, 5. PC Berlin, Germany, 6. PC Lille, France, 7. PC Erfurt, Germany, 8. PC Zürich, Switzerland, 9. PC Mainz, Germany, 10. PC Bonn, Germany

Objective: In recent years the GfKT invented a working group which should collect and analyze experiences about drug overdose to provide drug monographs. Together with another GfKT working group we developed an exchange format for case data. The example of amlodipine is used to demonstrate how case data can be exchanged and which conclusions can be drawn from the collected data sets.

Methods: The participating centers were asked to send data of all cases which met the following criteria: 1: Monointoxication 2: Uncertainty in the dose less than 10 percent. 3: Follow up for at least 12 hours. The centers were encouraged to send additional cases not meeting these criteria if they consider them useful to describe special aspects of amlodipine toxicity. Centers should use the developed spread sheet format if possible. Information implied in other fields (e.g. free text remarks) were used to improve incomplete data sets.

Results: 5 of 10 Centers sent a total of 88 cases. All but one provided information in the developed spread sheet format. 52 cases fit the criteria 1 to 3. Main symptoms were arterial hypotonia, tachycardia, and drowsiness. Of 26 children all but one ingested less than 1 mg/kg. All children developed no or minor symptoms. 7 of 26 patients over 14 years had moderate or severe symptoms after ingestion of 100 mg or more. 1 of these 26 patients died. Another fatality was found in the additional cases which met not the mentioned criteria for complete analysis. First symptoms occurred within 1,5 to 3 hours. Moderate or severe symptoms after 3 hours or later.

Conclusion: With 1 mg/kg or less only minor symptoms occurred. Main problem is cardiovascular depression. The exchange data format is useful to exchange case data and to draw conclusions relevant for daily work in poisons center. The centers should strive for higher follow up rates and further harmonisation of the poisons centers’ documentation.