The Identifying Scale to Determine Origin of Poison.

Vasily V. Afanasiev MD, PhD, D.Sci Division of Emergency Medicine, NW Medical University named after I. Mechnikov St. Petersburg, Russia.

DOI: https://doi.org/10.52340/9789941519109.13

Background.

Acute poisonings with xenobiotics may cause life-threatening disorders, which need urgent medical assessment. Toxscreen identification need time, and clinical picture sometime is not enough to perform the diagnosis. Diagnosis «Poisoning by toxic of the unknown origin» is unacceptable and couldn,t be classified, therefore other approaches need to resolve the problem. Aim. An identifying system for detecting a toxicant in case of poisoning with an unknown origin is proposed for the discussion. Method. The scale represents coordinate system where ordinate axis reflects the impaired consciousness (arousal, soporific, comatose), and several abscises axis which reflects the changers in functional system illustrating neurotransmitter toxindrome.

Results. Being simulated on the computer the system construct toxindrome in the current time interval, and makes the possibility to identify the group of toxicant. We analysed more than 2000 cases of acute poisonings, including patients from pediatric setting. Conclusions. The system is easy to use and may be useful in case of men-made or technological disaster.

References: MarkovaI.V., Afanasiev V., Tzibulkin E.K. Pediatrics and Adolescents Clinical Toxicology Hand-book, «Intermedica», SPb, 1998, V1, 458p.