Detection of Paracetamol indicates Phenacetin-induced Methemoglobinemia in a Bodypacker

Poechacker Stefan, Klingbacher Eva, Lang Stephan, Raab Gerald, Schmid Rainer, Reichel Julia, Gustorff Burkhard, Toxicologic ICU, Dpt. of Anesthesiology, Intensive Care and Pain Medicine, Wilhelminenspital, Vienna, Austria

Objective: To report an unusual case of methemoglobinemia in a bodypacker.

Case report: A 46 year old male presented to us with a self-reported history of swallowing drug containers containing cocaine of unknown number, weight and concentration. At presentation, physical examination revealed no pathologies, the patient was slightly anxious and agitated, laboratory values were in normal ranges except a positive finding for cocaine in a urinary specimen.

Besides standard ICU monitoring we provided oral charcoal in repeated doses (15g every 4 to 6 hours) to prevent resorption of the drug as well as prokinetic medication.
A multislice CT scan of the abdomen showed a significant number of drug containers located in the stomach.

The poor quality of packaging (remainings of one container in the faeces consisted of the finger part of a rubber glove and self-adhesive tape) necessitated prolonged ICU monitoring and charcoal-medication.

The following days the patient developed repeatedly signs of substantial mental distress with tachycardia, panic and delirium, lacking other signs of cocaine toxicity, all controlled by administration of diazepam. A coincidentally performed blood gas analysis showed a significant amount of methemoglobinemia (20%), a finding not known as cocaine- but benzocaine- or phenacetin-related toxidrome.

Benzocaine and - rarely reported - phenacetin are used in drug-trafficking as diluent to maximise economic benefit. In absence of signs of benzocaine-toxicity and lacking the ability to directly measure phenacetin we measured its metabolite paracetamol; positive values indicated the presence of phenacetin as culprit agent for the methemoglobinemia. The blood levels for methemoglobin normalised spontaneously after a few hours; the patient suffered at least from 5 of the described episodes, partly correlated to radiologic findigs of desintegration of the drug containers.

Conclusion: Phenacetin is a rarely described cause of methemoglobinemia in drug-trafficking; the observed toxicity mimicked cocaine-toxicity, potentially leading to misdiagnosis. The detection of paracetamol as surrogate for phenacetin might be helpful in this situation.