A Case of SPM-PRX Overdose

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Citation

Abstract
The most recent ‘Drug-related Deaths in the UK’ Annual Report (Jan-Dec 2009) served to reinforce that substance misuse remains a serious problem in the UK, with 2,182 notifications of drug-related deaths, representing an overall increase of 11.8% over the 2008 figures (although the increase in reporting must also be taken into account). Importantly, despite the emergence of GBL and GHB, opioids/opiates continue to be, by far, the principal substance implicated in these deaths. This report details a successful approach to a case of SPM-PRX overdose (an opioid), unique given the absence of any existing case reports involving this substance.

CASE REPORT
A young adult male (unknown name and age at presentation) was admitted to the Accident & Emergency (A&E) Department post-cardiac arrest. Half an hour previously passers-by had witnessed the gentleman acting strangely shortly before collapsing on the street, subsequently showing no signs of life when stimulated. By-stander cardiopulmonary bypass (CPR) was commenced immediately and London Ambulance Service (LAS) contacted. On their arrival, cardiac arrest was confirmed and CPR re-commenced, with return of spontaneous circulation (ROSC) after a total of ten minutes (initial rhythm unknown by LAS, no drugs or shocks administered). Despite return of cardiac output, the gentleman demonstrated negligible respiratory effort and remained Glasgow coma score (GCS) three, with pinpoint pupils bilaterally. He was intubated at the scene and then during transfer to hospital, LAS administered two 400mcg boluses of naloxone for presumed opioid/opiate overdose, which they reported resulted in minimal improvement in respiratory rate, still requiring artificial ventilation. He was cardiovascularly stable and in sinus rhythm during transfer.

On arrival in the A&E, the patient remained intubated/ventilated with good oxygenation but no independent respiratory effort; cardiovascularly stable (normotensive, no tachy/bradyarrhythmias, and in sinus rhythm with an unremarkable 12-lead ECG), well perfused although slightly cool peripherally; GCS four (upper limbs extending to pain, no clear lateralising signs, and relatively brisk ankle reflexes bilaterally), pupils 2-3mm but equal and reactive; on full patient exposure, ten large pale blue coloured capsules marked “SPM-PRX WOCKHARDT” (Figure 1) were found in the patient’s trouser pocket, but no patient identifiers or additional information.

Figure 1
Figure 1: A capsule of “SPM-PRX WOCKHARDT”

Arterial blood gas analysis was unremarkable with pH, base excess, lactate, glucose and electrolytes within normal ranges, with excellent oxygenation and normocapnia due to continued artificial ventilation. Blood results (Full blood count, urea & electrolytes, liver function tests, glucose, coagulation studies) were within normal ranges. Toxicology revealed a plasma paracetamol level of 48 mg/L and urine that was positive for opiates, with all other toxins/substances testing negative. Since there was no information on the quantity of paracetamol or duration since ingestion, this gentleman was treated as a high risk patient and
A Case of SPM-PRX Overdose

administered N-acetyl cysteine as per British National Formulary guidelines.

The patient was sedated with propofol 1% 20ml/hr and following CT Head (which demonstrated no intracranial pathology) and chest X-ray (which showed no pathology), he was transferred to ITU for continued post-resuscitation care, sedation and ventilation.

DISCUSSION

TOXBASE had no information on “SPM-PRX WOCKHARDT”, and furthermore the National Poisons Information Service were unable to provide any additional information on this substance, but recommended on the basis of the toxicology results, that it was highly probable that “SPM-PRX WOCKHARDT” was an opiate-based substance of abuse, and that this gentleman should be treated as per a mixed paracetamol/opiate overdose with full supportive management as required.

A literature search did not find any previous official case reports involving “SPM-PRX WOCKHARDT”, but there have been several recent news reports from India of police intercepting and seizing large quantities of these illegal capsules, and one reported the death of a young man discovered at a train station in Danapur, found in possession of a large quantity of “SPM-PRX”.

This gentleman was sedated and ventilated overnight as recommended by the National Poisons Information Service and extubated uneventfully the following day. He developed no additional complications from the opiate and paracetamol ingestion (acid-base status, liver and renal function, glucose and coagulation studies remained within normal limits) and he suffered no apparent neurological sequelae from the cardiac arrest. It remains unclear whether this was an intentional or unintentional mixed overdose. However, this gentleman was confirmed the following day to be a 27 year old previous A&E attendee, having presented several months ago with low GCS following a reported heroin overdose, requiring overnight admission but no invasive support on that occasion.

The background history, together with the clinical presentation and toxicology results suggest that “SPM-PRX WOCKHARDT” is an opioid-based illicit substance that most likely caused an initial respiratory and then subsequent cardiac arrest in this gentleman, which following ROSC after successful CPR, was then managed by the usual supportive measures employed in a case of known/recognised opioid/opiate overdose. Given the scarcity of data on SPM-PRX, hopefully this case report will provide some useful information for clinicians in the management of patients presenting following ingestion of SPM-PRX in the future.

References

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