

The Pathology Group, P.C.

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2021 N. 12th Street • Grand Junction, Colorado 81501 • (970) 256-6462

REVISED POSTMORTEM EXAMINATION REPORT

NAME: Morgan Ingram

CASE #: 11-289 Complete Autopsy

IMMEDIATE CAUSE OF DEATH

A. Amitriptyline intoxication

OTHER SIGNIFICANT CONDITIONS: None

ADDENDUM INFORMATION AND OPINION RECLASSIFICATION

Contrary to the initial representation and documentation of porphyria as a presumptive diagnosis for the decedent, the certainty of the diagnosis of porphyria as the underlying cause of death, and manner of death classification as natural, has been questioned; therefore, additional investigation and medical information from various sources and facilities has been collected and reviewed. A portion of the information sought has included medical records that might assist in including or excluding inherited heart rhythm syndromes or other potential causes of sudden death. Based upon the acquisition of the additional information, additional testing was performed and updated status of the stalking investigation was sought.

Analysis of the decedent's postmortem toxicology report, specifically the Amitriptyline level, was reconsidered. As noted in the report issued on December 19, 2011, Amitriptyline is subject to postmortem redistribution. The postmortem blood level of Amitriptyline may increase by an average of 3.1 times (range 0.6 to up to 15 times) when compared to antemortem samples. Individuals taking Amitriptyline over long periods of time may experience higher levels than Amitriptyline-naïve patients. The decedent in this case appears to have been first prescribed Amitriptyline in 2003, a time period of 8-9 years of use. The decedent's postmortem blood concentration of 7909 ng/mL of Amitriptyline and 2833 ng/mL of Nortriptyline is 2.1 times higher than the average fatal Amitriptyline blood concentration of 3.7mg/L (range 2.7 – 4.7) and therefore potentially within the range of the effects of postmortem redistribution. No intact or partially intact pill fragments were identified in the gastric contents during the postmortem examination and gastric contents were not initially submitted for evaluation. The results of the toxicology analysis were reviewed with a toxicologist from AIT Laboratories prior to issuing the report dated December 19, 2011. In consideration of the case review, the gastric contents were sent for analysis on June 6, 2012. The results of the analysis of the gastric contents revealed a 2287440 ng/mL concentration of Amitriptyline. Although the exact number of pills ingested cannot be determined, based upon the stomach content volume and Amitriptyline concentration, approximately 18 tablets of 25 mg Amitriptyline tablets would be necessary to reach such a concentration. The amount of ingested drug is far in excess of the prescribed dosage and far in excess of a typical inadvertent over dosage. A 175 ng/mL concentration Cyclobenzaprine was also found in the stomach contents. The amount consumed is consistent with a deliberate

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intoxication. The results were reviewed again with a toxicologist from AIT Laboratories. In consideration of the findings, the postmortem blood Amitriptyline level is considered to be a lethal level rather than an artifact of postmortem redistribution. No information gathered thus far provides objective support for an inherited heart rhythm syndrome including an EKG reported on October 8, 2009. No reviewed information unequivocally excludes the diagnosis of porphyria and in fact, according to the medical record, porphyria was considered the tentative working diagnosis for the decedent's chronic recurrent abdominal pain. Genetic testing was contemplated but was not completed. In consideration of the above findings the cause of death is reclassified as Amitriptyline intoxication due to an ingested Amitriptyline overdose.

With regard to the stalking investigation, there are no objective conclusive findings or reports made available to me by law enforcement or any other source to support an opinion that the death is directly attributable to another person or persons. There was indication that the decedent was concerned and stressed regarding a stalker. There was no indication of any trauma. There has been no objective evidence produced to indicate that another individual was physically present at the time of intoxication. There is no evidence of a struggle or evidence to indicate that the decedent was physically forced to ingest Amitriptyline. Therefore the manner of death is reclassified as suicide. If objective information is produced indicating that the decedent was somehow forced against her will to consume an Amitriptyline overdose and observed until incapacitated the manner of death may be reclassified as homicide.

MANNER OF DEATH: Suicide

_____ Date: July 28, 2012

Robert A Kurtzman, DO

Forensic Pathologist