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April 6, 2001

Eric Pfeifer, MD
 Mayo Clinic
 200 First Street SW
 Rochester, MN 55905

Dear Dr Pfeifer:

In light of National Medical Service Laboratory's assay results from a second set of Linda Adanalian's tissues, I am authoring this addendum.

The NMS assay results from samples of hair, kidney, liver and plasma deserve comment. The liver and kidney results again show highly elevated selenium amounts, with both greater than 5 times higher than expected norms. These findings are consistent with previous assays performed by NMS, Baylor Toxicology Services and the Mayo Medical Laboratory. The assay results continue to show tissue concentrations consistent with reports of fatal selenium exposure.

The NMS hair assay reported a result of, "none detected." This hair assay is consistent with the Mayo Medical Laboratory's June 13, 2000, hair assay. The striking lack of selenium in the hair is in stark contrast with the elevated organ selenium levels. This confirms that the elevated tissue selenium concentrations were caused by an acute exposure. Excessive selenium would have been deposited in Ms. Adanalian's hair if this had been a chronic exposure (Lombeck, et al, Terada A, et al).

The 90 mcg/ml plasma concentration is dated March 23, 2001. The medical literature raises significant concerns about the validity and reliability of this result. The well-known and formidable problem of selenium volatilization from blood and serum casts serious doubt on the assay results of any blood or serum sample held for so many months prior to assay. (Hahn, et al) I have spoken with the lead pathologist in this case, Albert Siu, as well as the Fresno Community Hospital laboratory, which initially tested and stored the ante mortem specimen. The March 23rd assay results are reportedly from the remaining 0.5 ml of the initial blood sample taken from Ms. Adanalian ante-mortem. The handling history and use of this sample since removal from Ms. Adanalian reveals that several different laboratories (and multiple laboratory personnel) have utilized it for a number of previous tests. Such handling causes multiple ventilations of the container air space. These repeated ventilations result in loss of the volatile selenium from the sample. Thirteen months later, I believe it is impossible to estimate the amount of selenium loss. Accordingly, attempts at interpreting this assay, in my opinion, are without scientific basis. This is also true for Expertox's previous assay of Ms. Adanalian's post mortem whole blood. That sample container again was opened repeatedly for a number of other tests while being stored for many months prior to the selenium assay. While the whole blood sample showed selenium



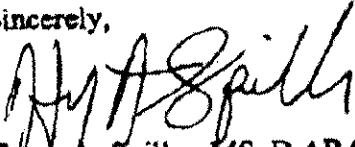
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concentrations approximately four times higher than the NMS assay, it also carries the same serious validity and reliability questions and has the same interpretation problems.

In conclusion, NMS's March 23rd assay results re-confirm that Ms. Adanalian suffered an acute Selenium toxicity event on February 11, 2000. I continue to agree with and support your opinion that selenium played a major, if not exclusive role, in causing Linda Adanalian's death.

Sincerely,



Henry A. Spiller, MS, D.ABAT, D.ABFE
Director, Kentucky Regional Poison Center