Improvement of Essential Hypertension After EDTA Intravenous Infusion Treatment

James A. Jackson, MT(ASCP)CLS, Ph.D., BCLD[1] and Hugh D. Riordan, M.D.[2]

This white male patient was first seen at the Center in 1985 for treatment of angina and essential hypertension. He was 51 years of age with a long history of essential hypertension. He was told at about age 18 that he had "high blood pressure" with a systolic blood pressure of 180 mm/Hg. No treatment was prescribed at that time. The history also revealed that both his mother and father died at age 69 of myocardial infarction.

While in his 20s, he became a private pilot and passed three separate FAA flight physical examinations. On each examination a comment was made that "his blood pressure was a little high". Later, on a physical examination with a different physician, his blood pressure was a 170/100 mm/Hg and he was diagnosed with essential hypertension. His medication consisted of daily doses of 120 mg of Inderal,® 3 "diazide capsules", and 3 SLOK® tablets. He failed his next FAA flight physical because of his essential hypertension and the medication being taken.

He continued on medication over a period of fifteen years with fluctuations in his blood pressure. When first seen at the Center, his blood pressure was 140/85 with medication; 180/100 without medication. He was given an initial intravenous infusion of EDTA which consisted of 3.0 g EDTA (Keylate,* Edtite sodium, The Key Company), 15.0 g ascorbic acid buffered in sodium ascorbate (Bronson Pharmaceuticals), 800 mg magnesium chloride, 40.0 mg procaine and 1000 units of heparin delivered in 500 mL of sterile, deionized water. Pre and post-chelation 24 hour urine samples were collected and aluminum, cadmium, lead, mercury, manganese, chromium, copper, iron, zinc, calcium, and magnesium levels measured. The lead

1. Professor and Chair, Clinical Sciences Department, The Wichita State University, Wichita, Kansas 67208.
2. The Center for the Improvement of Human Functioning International, Inc., 3100N. Hillside, Wichita, Kansas 67219.

level was of particular interest as several published studies demonstrated a relationship of lead levels and hypertension.[1-4]

His pre-chelation urine lead level was 14.0 ug/24 hours. The post-chelation urine lead level was 91 Ug/24 hours. The Center considers a 5-fold increase in urine lead excretion after chelation an indication of increased body load of lead. He was then started on a series of 30 EDTA intravenous infusions administered at approximately weekly intervals over a period of seven months. Each treatment was transfused over a period of 3-5 hours.

Other post-chelation urine studies were performed over a period of time and showed urine lead level of 39, 40, and 50 ug/24 hours respectively. Complete blood counts, urinalysis and chemistry profile were done throughout the treatment and showed no adverse effects of the treatment.

The patient slowly decreased his medication during the EDTA treatment and stopped them completely at the last chelation (March 14, 1986). His blood pressure at the last chelation was 124/84 mm/Hg. He has not taken any blood pressure medication since the last chelation treatment. He also decided to take another flight physical to renew his private pilot license. He passed without any problems.

References

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