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## EDTA Chelation Therapy in Chronic Degenerative Disease

EFRAIN OLSZEWER\* and JAMES P. CARTER

*\*Clinical Cardiologist, Hyperbaric Oxygen Clinic, Sao Paulo, Brazil CE04503. Chief of Nutrition Section, Tulane University, School of Public Health & Tropical Medicine, New Orleans, LA, USA 70112*

**Abstract--**A retrospective analysis of treatment results from 2870 patients, with various chronic degenerative and age-associated diseases, who were treated with di-sodium magnesium EDTA chelation therapy, suggests that the case against EDTA Chelation Therapy should be re-opened.

Using qualitative but never-the-less standardized criteria for improvement, our analysis shows that EDTA Chelation Therapy resulted in "marked" improvement in 76.89% and "good" improvement in 16.56% of patients with ischemic heart disease; also, "marked" improvement in 91% and "good" improvement in 7.6% of patients with peripheral vascular disease and intermittent claudication. In a group of patients with cerebro-vascular and other degenerative cerebral diseases, 24% had "marked" improvement, and 30% had "good" improvement. Of four patients with scleroderma, three had "marked" improvement and one had "good" improvement. Seventy-five percent of all of the patients had "marked" improvement in "geriatric symptomatology of vascular origin".

The authors recommend renewed study of EDTA Chelation Therapy. The possibility of a "tomato effect", i.e., a drug which works, but the majority of physicians believe that it doesn't work, needs to be ruled out. A favorable climate needs to be created, in which FDA-approved studies of its usefulness in treating peripheral vascular disease can take place.

# Deferoxamine Therapy in High-Ferritin Diabetes

PAUL CUTLER

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Serum ferritin and diabetes control were evaluated in 18 white patients with poorly controlled type II (non-insulin-dependent) diabetes who had no known causes of iron-storage disorder. Serum ferritin levels were found to be elevated with normal serum iron and total iron-binding capacity in 9 of the 18 patients studied. Because excess iron, typified by hemochromatosis, is associated with diabetes, and diabetes has been shown to improve after lowering total-body iron load through repeat venesection, I investigated whether regulating elevated ferritin levels could facilitate diabetes control. Deferoxamine (DFO), a known specific chelator of iron, was used because of its capacity to correct excess iron stores. All 9 patients in the high-ferritin diabetic group and 7 of 9 diabetic control subjects with normal serum ferritin levels were given DFO (10mg/kg i.v.) twice weekly. Diabetic control, fasting glucose, triglyceride, cholesterol, HbA<sub>1c</sub>, and serum ferritin levels were monitored. Data show that lowering elevated ferritin levels correlated well with diabetes control and improved fasting glucose, triglyceride, and HbA<sub>1c</sub> in 8 of 9 patients with high ferritin levels. Lowering normal ferritin levels had no effect on diabetes control or on any of the other parameters in the 7 control subjects. This study shows there is a need to study iron metabolism in poorly controlled diabetes and demonstrated the value of DFO in controlling high-ferritin diabetes. *Diabetes* 38:1207-10, 1989

**E**xcess iron storage as a result of hemochromatosis (HCT) is strongly associated with diabetes, and diabetes has been shown to improve when body iron stores are lowered through repeat venesection. Serum ferritin is a recognized measure of stored iron. Elevated serum ferritin levels were found in 9 of 18 patients with poorly controlled type II (non-insulin-dependent) diabetes being treated with either insulin or oral hypoglycemic agents. The serum iron and total iron-binding capacity (TIBC) were normal in all patients. After known causes of HCT were ruled out, it became apparent that this group had an unusual form of iron-storage disease, and the hypothesis was then raised that the poor diabetic control in this group was due to increased body iron levels similar to that seen in idiopathic HCT. An attempt to achieve better diabetes control by lowering serum ferritin was undertaken. The only manifestation of iron-storage excess in this group, unlike in idiopathic HCT, was elevated serum ferritin levels.

Deferoxamine (DFO) is a known specific iron chelator and has been used to manage HCT when contraindications to phlebotomy exist. It was used in this group as a means of lowering ferritin and to see if diabetic control could be improved without resorting to repeat phlebotomy. Another rationale for DFO therapy is that it may have other beneficial actions relating to its ability to alter free radical pathology and lipid peroxidation, features that occur in conditions of iron overload.

Address correspondence and reprint requests to Paul Cutler, M.D., 4811 Yonge Street, Unit B4, Willowdale, Toronto, Ontario M2N 5X2, Canada.

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