

Treating Diabetes With Enzymes: What We Know Now.

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Up to a year ago, for anyone asking if systemic enzymes could help lessen the load of troubles that beset Type 1 diabetic patients, I would have told them about lowering pancreatic inflammation, and possibly helping with lower extremity circulatory issues. I would have never suggested that the use of enzymes could decrease the need for insulin, increase energy or reverse the seemingly myriad of things diabetics suffer from. Then we started getting information from Type 1 patients that amazed even me and that have subsequently sparked new research. Here are two typical case histories.

Case History #1:

A Type 1 diabetic Native American patient from Montana in his mid 40's, very insulin dependent, with peripheral neuropathy in the lower extremities (LE's) and presenting paresthesia as well in the upper extremities (UE's) radiating distally to the hand. Peripheral Vascular Disease (PVD) in the LE's had already caused several toes to be amputated.

Patient began taking therapeutic doses of fibrinolytic systemic enzymes (Vitalzym). Within weeks, circulation was opened in his feet and lower extremities. Skin there returned to a pink / flesh colour. Remaining toes now have full circulation and are no longer candidates for amputation. Lower extremity and upper extremity pain became paresthesia (tingling and pins and needles), and as a result is much more bearable.

The patient's insulin needs were decreased.

Case History #2:

86-year-old male Caucasian from Las Vegas history of Type 1 Diabetes for over 50 years. One below the knee amputation (left side) already done due to DVP, the other leg about to be amputated due to general lack of blood flow and arterial blockage. Poor circulation body wide and a gray / white pallor to the skin also body wide. Neurological pain was had at both lower extremities. Urine flow beginning to flag as patients kidneys became laden with scar tissue (Glomerulosclerosis). Patient was highly insulin dependent. Above that the patient was functionally blind in one eye from a Lasix procedure that had generated scar tissue over the retina.

After several weeks of systemic enzyme (Vitalzym) use the patient first noticed a lessening in his lower extremity neurological pain (neuropathy). His skin colour in the remaining leg changed to rosy as circulatory pathways were opening. Outer layer of whitish dead skin shed off leaving what resembled a "body wide dandruff", exposing new

pink /flesh tone skin beneath. The existing leg became pink with blood flow, no longer ulcerated, no longer had ischemic pain and was saved from amputation.

Urine flow increased as fibrin was lysed (eaten away) from the kidneys. If the urine was allowed to stand in the toilet a layer of tiny bits of fibrin (component of scar tissue) in what resembled fiberglass floated to the top. The fibrosis that had blinded one eye was lysed away and the patient now has better than 20/20 vision in that eye. Most significantly, the patient's own insulin production has returned (thought to be impossible under the auto immune theory of diabetic pancreatic destruction). He is no longer insulin dependent. After medical testing the patient is no longer considered diabetic at all and is off all medication.

Sound fantastic? It did to me, even as a Naturopath who expects nature to do fantastic things. Diabetes is one of those diseases you never expect patients to get better from. Even after several years of working with systemic enzymes I had heard of some Type 2 patients improving their energy and leveling off their sugar highs and lows but I had never expected any form of improvement in Type 1 patients, the medical literature was very clear. Once the immune system destroyed the insulin producing portions of the pancreas, there was no getting those tissues to function again! That medical "truth" has turned out to be merely a medical theory.

Lets take a look at the present understanding of the root causes of diabetes and add our own conjectures based on what we have observed clinically. We know from the present research work being done that the root cause of diabetes is inflammation of the pancreas. How and why this inflammation sets in we yet do not know. As we also know from the physiology of trauma, inflammation breeds fibrosis or scar tissue. One follows a chronic course of the other.

Fibrosis is also the culprit in the Peripheral Vascular Disease. In this condition, fibrin plugs form in the micro circulation (tiny blood vessels) forming blockages to full blood flow. Fibrin also forms the matrix for arterial plaque. Inflammation of trauma to the inner lining of an artery (intima), causes the traumatized or weakened section to shore itself up with scar tissue. On the spider web of scar tissue fat, calcium and heavy metals accrue forming what we know as arterial plaque. Once the fibrosis blockages become extensive enough, the patient presents the signs of PVD, which are cold extremities, intermittent claudication (pain on walking from lack of oxygen supply to the tissues known as ischemia), non healing ulcerations of the skin and eventual death of tissue creating gangrene leading to amputation.

The high blood sugar levels had during diabetes damages the body's organs. One of the first organs to be damaged are the nerves to the legs and then the arms. Wherever the circulation is poorest the nerve damage follows and radiating nerve pain is had (neuropathy). The damage begins with, you guessed it, inflammation and progresses with, you guessed it again, fibrosis. It is this inflammation into fibrosis that seems to be a recurring theme in diabetes.

For a moment lets do some education on orally administered systemic enzymes. They have a 5 decade history of wide spread medical use in Germany, Central Europe and Japan with over 150 million patients in Europe alone having undergone enzyme therapy in the last 4 decades. There are over 200 peer-reviewed studies proving the absorption, therapeutic action and total lack of toxicity (no LD-50) of systemic enzymes. Their primary action is anti-inflammatory, (though not through a COX 1 or Cox 2 action. The enzymes instead “eat” pro inflammatory cytokines). The enzymes also have a proven lysing action on all types of fibrosis and scar tissue leaving normal or endogenous tissue entirely intact and un-bothered. This is due to the body “tagging” excesses of fibrin as exogenous proteins. (The subject of protein tagging and its discoverer won the Nobel Prize in biology in the late '90's). Entering the key words: systemic enzyme, serrapeptase, nattokinase, bromelain, pancreatin, papain, trypsin, chymo trypsin into the search engine at Pub Med will bring up some of the current research on systemic enzymes and their applications. A search in the “medical fields” section of www.mucos.cz will show abstracts of the extensive older research done with the first systemic enzyme blends of the 50's and 60's. It has to be said that there is nothing, no drug or substance, in either the allopathic medical world or in the natural health world that can remove scar tissue but highly fibrinolytic systemic enzymes.

Current thinking on diabetes is that the body’s immune system attacks the pancreas creating inflammation. This may be so. Further, the current thinking is that the inflammation brings about the destruction of the Islets of Langerhans and its Beta Cells, the places where insulin is made. This may not be so. If the studies that are currently being planned and executed further demonstrate what we are seeing clinically with Type 1 patients on systemic enzymes, then this point will have to be re-thought. Clinically most of the Type 1 patients have a significantly lower need for insulin while some no longer need the insulin at all. This would suggest that the Beta Cells and the Islets are not destroyed. I conjecture that they are merely clogged by the fibrosis created by the inflammation. Once the causative inflammation is reduced and once the fibrinolytic action of the enzymes has eaten away the fibrosis and reopened the channels, then what ever production the Islets can make can actually get into the system.

I believe that the global (body wide) non-toxic, anti-inflammatory effects of highly fibrinolytic systemic enzymes and the scar tissue eating effects of the same enzymes are the reasons we are seeing the decrease in pancreatic inflammation, decrease in diabetic neuropathy, in it's associated Peripheral Vascular Disease, and the decrease in insulin dependence we are seeing clinically in Type 1 patients. Let's see if the research further verifies the observed findings and gives us more insight into the pathways of action.