

Citric Acid Cycle Catalysts

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The contribution of homotoxicology to the progress of medicine has been pivotal because it links homeopathic concepts and laws to modern scientific knowledge.

Dr. Reckeweg's starting point was the study of homeopathic materia medica, but he enriched and added to it in various ways and on various levels.

An original and essential contribution resulted from the great attention paid to the study of the cell, which Reckeweg defined as the primary and fundamental element in which disease originates. An energy deficiency in the cell causes it to dysfunction, and an individual cell dysfunction is the start of a more complex pathology, which inevitably becomes an organic disorder. When it enters a crisis, the cellular energy plant (i.e., the mitochondrion) begins to lack energy for any biochemical cellular process; in particular, the proteins, enzymes, and cytokines which are fundamental to the life of a specialized cell are not synthesized.

A cell that is lacking energy reduces its function to a minimum, uses large quantities of glucose via a metabolic route that does not require oxygen, pollutes the surrounding connective

tissue, and progressively assumes the characteristics of a neoplastic cell.

This whole sequence of events which leads from normal physiology to dysfunction, to degeneration, and eventually to neoplasia, is initiated in the mitochondrion and, more specifically, in that sequence of oxidative reactions involved in pyruvic acid catabolism and ATP production. It is clear how important it is to keep this sequence of key biochemical reactions as efficient as possible for both the catabolic and anabolic aspects of cell function.

Patients with chronic degenerative diseases, which are those we encounter most frequently today in our natural medicine clinics, primarily need specific, selective stimulation of the citric acid cycle. Treatment with intermediary catalysts in a dilute, dynamized form offers an exceptional therapeutic opportunity in this domain.

Therapeutic approaches

The patient is assessed and, if this shows that he is in one of the cellular phases of the homotoxicology table, total stimulation of the citric acid cycle must be carried out, either by the administration of Coenzyme compositum or the individual catalysts if they are available.

If we consider that the organism often uses the building blocks of the citric acid cycle via many other metabolic pathways, it is clear that deficiencies of substances at various levels will tend to block the cycle once again. It is therefore useful to start therapy to support the citric acid cycle with Coenzyme compositum, at the rate of one ampoule sublingually or by injection 1 to 3 times weekly. Children, in whom the citric acid cycle has presumably not reached a block as in adults or in chronically ill patients, can obviously start directly with the catalysts providing energy and a reactive stimulus to the organism.

Although this is the best general strategy for using the citric acid cycle catalysts, it is also useful to be familiar with the role and consequently the clinical indications of the individual catalysts, which we summarize below.

Natrium pyruvicum

This is the next product in glucose metabolism. If the metabolism and the use of this metabolite are not stimulated, it tends to accumulate in the cytoplasm, where it is used anaerobically and induces tissue acidosis.

Citric acid

This is the first stage in the citric acid cycle and represents a basic building block not only in the production of energy at this level, but also in the synthesis of essential fatty acids fundamental to the nerve structures of the organism.

Cis-Aconitic acid

This is a metabolite which forms very fleetingly. A lack of its regulation leads to general problems of tissue hyperreactivity.

Alpha-Ketoglutaric acid

This is a fundamental stage in the citric acid cycle, but it is also a fundamental metabolite in the synthesis of some biological amines important for the functioning of nerve tissue, such as glutamic acid and glutamine. If the cycle is blocked at this point, it causes changes in neuromuscular function.

Succinic acid

This is the substance used in the innermost part of the mitochondrion to trigger oxidative phosphorylation, the peak stage of energy production in the cell. Blocking of this metabolic pathway leads to damage to tissues, particularly those with a high energy requirement such as hematopoietic tissue in particular.

Fumaric acid

This is a key stage not only in the citric acid cycle but also for a whole series of metabolites involved in the synthesis of fundamental amino acids, including tyrosine and phenylalanine. Blockage of the cycle at this point causes disturbances of lipid metabolism.

DL-Malic acid

Blocking of the citric acid cycle at this point prevents the correct use of Natrium pyruvicum. Such a blockage is typical in individuals with senile diabetes and causes many of the tissue and primary cell problems that occur in this disease.

Natrium oxalaceticum

This is a key metabolite for triggering the citric acid cycle through its reaction with acetyl CoA. A disturbance of this metabolic stage leads to a general weakening of organic reactivity, making the individual prone to disease and parenchymal toxin accumulation. It should also be noted that Natrium oxalaceticum is a precursor of aspartic acid, which is involved in the urea cycle and thus in the production of nitric oxide, a substance which is vital to the circulatory system.

Barium oxalsuccinicum

This is not a citric acid cycle catalyst but a salt originally believed by Reckeweg to activate cell reactivity in the elderly and in individuals in a degenerative phase.

In severe or chronic cases, an intensive stimulation of the individual components of the citric acid cycle catalysts may be beneficial. In my practice, I use the so-called "Samelpackung" (combination pack) of the citric acid cycle catalysts to achieve this.

In this, the 10 ampoules of the single pack of catalysts are administered at the same time, without placing too much importance on the route of administration. If possible, the 10 ampoules should be placed in a small infusion of 100 cc, which should be administered over about 30 minutes. Intramuscular administration of the 10 ampoules is, however, also effective, and a good effect can likewise be obtained by the sublingual route. The administration of the 7 citric acid cycle catalysts, the reactive stimulus salt Barium oxalsuccinicum, and the trace elements magnesium, manganese, and phosphorus, all in a dilute, dynamized form, gives this mitochondrial metabolic cycle a remarkable reactive stimulus.

This "rekindling" or stimulation should be repeated every 2 to 3 weeks in very elderly patients or those with metabolic dysfunction or neoplasia because various toxic problems other than metabolic problems tend to re-block the citric acid cycle. Patients who are not in a clearly degenerative phase will, however, need this therapeutic application only every 3 to 6 months. ■



The mitochondrion provides cellular energy through a series of biochemical reactions called "citric acid cycle." In patients with chronic degenerative diseases, intermediary catalysts are successfully used to stimulate this process.