Therapeutic applications of Clinoptilolite-Zeolite (MANC® / TOXAPREVENT®)

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A report from Dr. Erwin Walraph – Stralsund, January 2016

Again and again I receive inquiries concerning the application of clinoptilolite-zeolite by therapists and patients. In this short review would like to record my personal (and others) experiences with this substance from a period of more than 20 years.

The personal exposure of every human to toxic environmental influences, food, tobacco and drugs is rising over the last decades. It is in part the result of continuously evolving technological developments and enhanced insights into the nature, and the processing and preservation of food. This process can not be stopped. It is in the nature of man to use and modify almost everything in order to make the most use of it.

As people are getting older the statistical frequency and severity of certain diseases increase. Primarily it comes to health disorders and overloads of the metabolic organs particularly liver, intestine and effects are also seen on the psyche. At the same time this stresses and overloads the immune system of the organism. In general, the capacity of the immune system to react properly is reduced with rising age.

Medical research is trying to adapt to these requirements. However, it is currently in a crisis situation and quite often well being is dependant on personal commitment and individual financial resources. Basic medical research is limited by financial resources and sponsored research is often not free of limited knowledge, experiences and misleading interpretations. Furthermore, financial resources for continuous and optimal medication for sick people is limited by the payers and thus not always for the benefit of the patient.

In recent years, the human being is increasingly recognized seen as a biopsychosocial organism by holistically minded scientists and doctors. Slowly modern ways of thinking about medicine are becoming increasingly popular. Hecht (1) calls it "gentle, safe, humane medicine". More and more results and findings of the so called traditional medicine are integrated into school medicines treatment and their therapeutic effects on humans are studies and applied if beneficially. This is also including findings about the applications of clinoptilolite zeolite. I gained my best personal experience I have with the medical devices of FROXIMUN AG marketed as TOXAPREVENT PLUS, AKUT and SKIN. In these medical devices clinoptilolite zeolite is used as special micronized and activated Ca-Clinoptilolite (MANC®), available as a powder in sticks, capsules, salves and cream formulation. What is most essential about it, is the purity of the source material and its modification during the processing towards an optimized mode of action. Clinoptilolite is not absorbed through the gastrointestinal tract as it was shown by investigations carried out by Dr. Nikolai Daskaloff in self tests with radioactive labelled clinoptilolite (personal communication).
Occurrence of silicon minerals in natural clinoptilolite zeolite.

In natural clinoptilolite zeolite silicon occurs in a proportion of 65-75%. It occurs in certain mountains in several countries formed by volcanic rock and can then be broken down into different chemical structures and compositions. Silicon and its compounds is present in many clays, sand, water and plants and for this reason is has been been around and used for centuries as a remedy in traditional medicine.

Seiler(2) e.g. published the example of the “Hunza” tribe living in the Himalayas and drinking silicon enriched glacier water. Doing so they achieve a life expectancy of an average of 100 years. Observations in zeolite caverns in Peru indicate that the energetic influences on people who stay in the mining areas turns our to be extremely intense positive on healing processes (rheumatoid disease, autoimmune diseases, fractures). This is caused much likely by the biogenic electromagnetic radiations of the silicates in these caverns. Likewise, it is reported from the Caucasus that sick animals by some instinct mechanism start to lick on superficial zeolite rocks and turn healthy again. People that have taken these observations started to apply the natural zeolite for treating diverse diseases on humans and with good results.

Chemical structure of natural zeolite.

According to Professor Hecht¹, the basic skeleton of the clinoptilolite zeolite is like a crystal lattice having calibrated cavities of 4,0-7,2 Ångstroms (Å). The crystal lattice consists of silicon (SiO₄) - and aluminium (AlO₄) – tetrahedral building blocks. Such solid tetrahedral or crystal lattices can probably contain at least up to 34 minerals, but in particular calcium, sodium, potassium, magnesium are kept most likely. The ratio of aluminium to silicon is 1:5.

Figure 1: The crystal structure of clinoptilolite-Na (Agoura, California) with cation positions from the refinement of Koyama and Takéuchi (1977). Typically clinoptilolite contains 4 to 7 cations per unit cell (Deer et al. 2004).
Basic effects of natural clinoptilolite zeolite on the human organism.

Silicon dioxide (SiO$_2$) is the second most abundant mineral in the earth’s surface, and a matter of fact an important component of the human being itself. It is mainly found in the connective tissues.

Clinoptilolite zeolite has two basic functions (according to Hecht$^1$) in the human body:

- Structure effected properties and
- release of colloidal silica.

This is an integrative bio regulatory operating principle important for the self-regulation of the human organism.

All therapeutic concepts involving clinoptilolite zeolite attribute to that principle. Clinoptilolite is used for the oral application on the mucosal skin through the digestive tract and for applications on the skin.

Therapeutic approaches for clinoptilolite zeolite.

1. Regulatory disorders and regeneration of metabolism, independent of the degree of the disorder.
2. Recovery from and depletion of pathological metabolites, contaminants, heavy metals, toxins and radionuclides in the organism.
3. Reregulation of disturbed lipid, protein and carbohydrate metabolism as well as the water balance.
4. Rebalance functions of the heart-circulation, the nervous system, the digestive system, the kidneys and the reproductive organs.
5. Protection of the body against the effects of free radicals, pollutants from the environment and also against ionizing radiation.
6. Facilitate the recovery in various diseases.
7. Reduction of side effects of chemical drugs or reinforcing their effects.
8. Inhibition of the aging process.
9. Increase the nonspecific and specific immune response.
11. Increase the performance of physical and mental processes.

The use of clinoptilolite zeolite in medicine can be extended to most medical sub disciplines and is applicable in all conditions showing the disorders listed above.

Some examples of known specific active properties of clinoptilolite zeolite in the human body:
Paediatrics

Illnesses such as allergies, parasites (e.g. Lambliasis), bronchial asthma, hypothalamic obesity syndrome, atopic dermatitis, digestive system disease (celiac disease, autoimmune diseases), kidney disease, thyroid disease, disorders of the visual system (improving blood flow).

First aid and for the treatment of burns and scalds of Grade I to IV and sunburn. From my experience TOXAPREVENT SKIN powder should be present in every house. In case severe burns (by hot water) of the skin in children (and adults) TOXAPREVENT SKIN, when immediately applied prevents the formation of bubbles in many cases. In the case of severe changes in the skin of degrees III and IV TOXAPREVENT SKIN may lead to faster healing and to greatly reduced scarring.

Surgery

In plastic surgery, TOXAPREVENT SKIN has been widely established. When directly applied to the surgically treated wound, a more rapid granulation of the wound edges is initiated and scarring is reduced.

It was found that the clinoptilolite used for the treatment of complicated fractures of the lower extremities promoted a shorter healing process with an average of 8 days. My own experience is limited to the the application on fractures on the lower extremities, but the this should be transferable to other fractures as well. In addition, the precipitation (depletion) of heavy metals like aluminium and mercury from the organism was very high. However, no was no excretion of zinc and selenium was found (see experiences from aluminium depletion).

Internal Medicine

The variety of options to apply clinoptilolite zeolite is like listed above.

Special features: Clinoptilolite zeolite shows a relatively rapid success in the treatment of anaemias. However, the causes of anaemia can be very versatile and always require specific diagnostics as describe by J. Hastka and G. Metzgeroth\textsuperscript{5}. TOXAPREVENT, applied on children and women with iron deficiency lead to an increase in the number of erythrocytes and the haemoglobin (Hb) values in a relatively short time (4 to 5 weeks).

Clinoptilolite zeolite acts by opening more iron sources in the ion exchange process of the organism and better bioavailability in the cell.

Clinoptilolite zeolite is an excellent tool for the normalization of Intestinal functions. It can be used in the case of histamine intolerance to reduce histamine levels in the intestinal mucosa. TOXAPREVENT PLUS also showed success in the treatment of leaky gut syndrome. In combination with a diet leaving out incompatible food (determined e.g. by food specific IgE and IgG4 diagnostics) and the simultaneous reconstruction of an optimized intestinal flora it supports the normalization of bowel functions. Quite often patients are experiencing an increase flatulence, but this disappears over time. In early stages of diabetes mellitus II
**TOXAPREVENT** in combination with optimal nutrition may reestablish an optimized metabolism.

**Use of TOXAPREVENT for migraine therapy (pers. communication Dr. K. Taubert, PhD).**

A group of 12 therapies resistant migraine were treated with TOXAPREVENT PLUS for about 3 months. The number of migraine days decreased in the patients to 43% and their migraine index fell 41% on average. Based on the data obtained at our laboratory the histamine concentration decreased in the patients by an average of 7% and the diamine concentration increased by an average of 32%. 6 of 11 patients felt much better mentally and physically as a result of the treatment. One patient showed amplified migraine attacks after finishing TOXAPREVENT treatment and one other patient did not suffer from further attacks even 4 months after treatment discontinuation.

**Dermatology**

In various skin diseases and skin lesions clinoptilolite zeolite can be applied in the form of TOXAPREVENT SKIN powder. In case of burns or scalds, the use of skin powder has already been mentioned above. Clinoptilolite application is also ideal for therapy of sunburns. Any sunburn should be treated immediately with the skin powder in order to prevent redness and blistering.

Combination treatments (externally and internally) in the case of otherwise treatment-resistant disorders such as acne vulgaris, atopic dermatitis, vitiligo (in initial stage), and rosacea. The treatments for rosacea have been successful if the therapy was continued over a period of several months and up to one year.

We monitored an excellent application of skin powder in ulcus cruris. Early stages of ulcus cruris (also, in the case of early bedsores) the affected region should be treated with the skin powder. If the ulcer has already greatly enlarged treatment should also include the wound edges (often treated with zinc salve in addition). As TOXAPREVENT SKIN powder does not clot like conventional powder it may get direct contact with the wound. It does not promote clumping or bacterial infection underneath. If the ulcer is larger than a 2-Euro coin, Repamun® should be applied in addition. This applies for the treatment of the so-called "diabetic foot" as well.

**Improved Mental Status**

The intake of clinoptilolite zeolite on healthy people showed a fundamental positive therapeutic effect on the psychological well being. **Continuous application of TOXAPREVENT led to mood brightening, increased endurance, increased mental and physical performance and better handling of stress related issues.** This effects require a long-term application. Therapy with TOXAPREVENT should be carried out for at least 8 to 12 months or longer.
Clinoptilolite zeolite as a general therapeutic agent of the elderly

80% of the world's population is proposed to suffer from the lack of silicon, a condition mainly affecting the elderly population. Clinoptilolite zeolite can compensate this deficiency when applied as liquid suspension (sticks). Next to improvements in health and quality of life following diseases may be positively affected:

- Arteriosclerosis
- Dysfunctions and bone diseases, especially bone degeneration.
- Resistance to infectious diseases
- Arterial hypotension
- Diabetes mellitus
- Sleep disorders
- Depressive disorders and chronic fatigue

Clinoptilolite zeolite in cancers

Clinoptilolite zeolite is not a direct cancer treatment, but through the regulation of mineral metabolism, the reduction of toxic substances, the immune modulation and regulation of oxidative processes it may have an indirect positive effect on the metabolism and thus to cancer growth. The standard therapeutic measures such as surgery, chemotherapy, radiation and immunology should not be violated. Standard therapies are supported by the addition of clinoptilolite zeolite.

It is essential to state that a complementary therapy in the case of cancer with TOXAPREVENT PLUS or AKUT in conjunction with immunotherapy for. B. thymus + Repamun®, fresh cell therapy (Dr. B. Aschoff, PhD), and maybe mistletoe should be initiated as early as possible. However, it has to be paused on the days when chemotherapy is applied.

There are several reports on positive effects of a high-dosage therapy with TOXAPREVENT. In this cases the dosage was set to approx. 15 grams per day. TOXAPREVENT is well tolerated in general and there are no known side effects. In the many years of application only 2 patients were detected, who showed up with clinical confirmed allergic reactions against TOXAPREVENT. This is just anecdotal reports and there is no studies on this issue, however this should be kept in mind. In general, a combination of TOXAPREVENT PLUS or AKUT with immunotherapies like e.g. thymus peptides, Repamun®, and fresh cell therapy⁶ (see below) shows positive cancer effects on cancer patients.

In general, clinoptilolite zeolite has no side effects. Thus, the medical device TOXAPREVENT may be used in any case of treatment in addition to a specific pharmacological treatment. The dosage has to be set according to the the severity of the disease by a therapist experienced in the application of clinoptilolite zeolite.

Clinoptilolite zeolite improves the blood and electrolyte haemostasis in regard to complex minerals and metals such as iron, magnesium, calcium, sodium, potassium, zinc and copper. This effect may most likely be the cause of faster healing monitored.
Excerpt of a report of the Aeskulap Klinik in Switzerland: Clinoptilolite in hormone-refractory prostate tumours.

During November 2005, 15 patients with hormone-refractory prostate tumours participated in a pilot study. For all participants of this study conventional therapies were no longer possible.

On 8 of the 15 patients participating a significant decrease in their PSA level undergoing an additional therapy with clinoptilolite and “Lycopenomin”. Tree patients experienced a stabilizing effect and on 4 patients no response was monitored.

PSA reduction was demonstrated on 8 patients. 3 of the 7 patients who experienced only a low PSA reduction, responded with a significant PSA reduction after the daily dose of clinoptilolite had been increased to 8 times 3 g per day. A positive treatment effect was monitored on these patients after an additional 3 months of therapy.

Another example of this clinic: A 39 years old patient with metastatic breast cancer in the skeletal system and the lungs decided to refuse further chemotherapy. When she was admitted to the hospital, she had a pericardial and pleural effusion on the left. The echocardiogram showed 2 suspicious pericardial areas, one with a diameter of about 2.5 cm. The clinical situation with daily increase in resting heart rate and slow decrease in blood pressure indicated the beginning of a pericardial tamponade - a life-threatening condition. After the start of a high-dose therapy with clinoptilolite given in a dosage of 10 times 3-4 g per day a rapid dissolution of the cardiac tamponade was observed by daily echocardiography. Within 4 days after treatment initiation the pericardial effusion was completely absorbed. Surprisingly after the 4 days of therapy, none of the pericardial metastases could be detected anymore.

Administration and Dosage
(Depending on the condition of the patient):

The dosage maintained at children - my experience covers from about from 2 years’ age – should relatively low. 3 times 1 (or 2 times 1) TOXAPREVENT PLUS capsule per day. Use TOXAPREVENT AKUT in case of immunomodulation and milk incompatibility. In case the caps can not be swallowed they may be opened and the content is dissolved in a little water and applied as suspension. From age 5 onwards the dose may be increased up to 3 times 2 capsules per day. On adults the dosage should be between 6 and 10 g per day. That is about 2 times 3 - 4 caps of TOXAPREVENT PLUS per day and in the evening one stick of TOXAPREVENT PLUS dissolved in water. Elderly people people should use the suspension like a mouth wash and then swallow it as this in parallel a therapy or prophylaxis against periodontitis or periodontitis.

Fig. 2: Clinoptilolite (TOXAPREVENT) as powder and in capsules. Photo: LvO
Make sure that enough fluid - about 1.5 to 2 litres of water per day - is drunken.

It is important to note that within 45-60 minutes after the intake of TOXAPREVENT no other drugs must be taken. Otherwise it can not be excluded that TOXAPREVENT might bind to the drugs and lead to either limited or increased effectiveness.

The duration of the application is dependant on the state and severity of the disease. Basically TOXAPREVENT should not be taken in high doses for more than a period of several months.

In the area of geriatrics and for longevity applications (anti-aging) the TOXAPREVENT is used more and more, especially by the elderly. The excretion/depletion of toxic substances (food additives, pesticides), heavy metals (lead, mercury, aluminium). Metabolic derangements, increase free radical burden of liver and kidney is the main purpose in this group. Even increasing dementia may be reduced at least in its progression quite frequently. By observations taken from the behaviours of animals and humans from native tribes, we know that the recurrent intake of silica with drinking water or food stuff is in close relation to a slow down of the overall aging processes dementia decreased (see Prof. Dr. Hecht\(^3\)).

References:

1. Hecht, K.: Zeolith – Lebenskraft durch das Urgestein, Prävention- Detoxhygiene- Ökologie, Spurbuchverlag, 2015,