

## **Assessment of Bio-Chelat™ in the relief for heavy metal burdens.**

Heavy metal burdens as a harmful substance is becoming more and more frequent. This possibility should always be explored when patients present unclear symptoms. The usual chelation treatment, particular DMPS, necessitates the use of relatively high doses of this harmful substance in treatments over long periods, or intermittent therapy. For this reason it was desirable to look for a drug to achieve a reduced burden to excrete heavy metals.

Often, no typical symptoms are seen in chemical poisoning by heavy metals when increased limits are seen in the blood. In general, the diagnosis of a chronic heavy metal burden belongs to the most difficult tasks in medicine. Likewise, when a heavy metal burden is found, the treatment should be free of side effects, when given over a longer time period.

The intake of penicillamine, calcium-edetate, DMPS and others is necessary for the treatment of acute poisoning, occasionally even with high doses. A chronic heavy metal burden, particularly when multiple permissible limits are recognized, but yet no toxic blood concentration, is the therapeutic use in the recommended doses (Dr. Dauderer) because of possible side effects is not justified. It would be much more meaningful to strive for a treatment with lower side effects.

Pre-trials showed the effectiveness and no side effects of Bio-Chelat™ when the documented allowable limits of heavy metals in the blood are increased.

The statistical analysis of the pre-clinical studies showed the reliability of those experiences that were gathered (see the summary of the results which also demonstrate a neutrality toward physiological minerals such as calcium, magnesium, potassium, sodium and selenium).

Another clinical study confirmed the results of these pre-clinical investigations and was able to prove that the treatment with Bio-Chelat™ leads to such a strong reduction of the heavy metal concentration in the blood, coupled with a slight decrease of zinc and leucocytes, and slight increase of thrombocytes and Gamma-GT-values, respectively. The additional confirmation regarding the physiologic iron, magnesium, calcium, LDH and GOT values showed that the general burden, particular on the liver, blood, and intestines, was missing when being treated with Bio-Chelat™.

This is to say that the results, in regards to both clinical studies, show the effectiveness of the heavy metal detoxification, harmlessness of the therapeutically used solution and allows the subsequent analysis of Bio-Chelat™:

1. Bio-Chelat™ is useful in the treatment of chronic heavy metal burden but should not be used in acute poisoning because of its mild effectiveness.
2. It is therefore not necessary to use the prevalently used high doses of EDTA in chronic heavy metal burdens and tolerate their side effects. Bio-Chelat™ is a strongly diluted EDTA substance containing other buffered substances and is fully effective over the duration of time used and without any side-effects during the removal of the patient's heavy metal burden.
3. The treatment is successful even when multiple permissible heavy metal limits in the blood are present.
4. Contrary to typical treatments and results, physiologic mineral concentration in the blood of Ca, Mg, K, Na, Se or Fe were not affected. This is of significant importance when patients of specific age groups are treated (kids, old people, pregnant women).
5. Clinically controlling additional parameters can demonstrate that Bio-Chelat™, even when used over multiple weeks (see clinical study), doesn't place a burden on the blood, liver or intestinal functions (see LDH results).
6. Bio-Chelat™ can be recommended, not only because of its' negligible food chemistry-like concentrations, but also because of its' complete harmlessness when used in the elimination of chronic heavy metal burden.

No position is taken at this time on the possible relief on the immune system by the gentle Bio-Chelat™ treatment.

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