

# Preventive Effect of Chinese Parsley (*Coriandrum sativum*, *Cilantro*) on Aluminum Deposition in ICR Mice

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**【Purpose】** The preventive effect of Chinese parsley on aluminum (Al) deposition was investigated in male ICR mice exposed to Al.

**【Materials and Methods】** Seven weeks old ICR male mice were exposed to 1000 ppm Al as Al chloride in drinking water for 39 days. Administration of Chinese parsley to mice by gastric intubation was performed for 25 days from 14 days after beginning of Al exposure to the end of experiment. After 39 days, the mice were sacrificed for the comparison of Al distribution. The localized Al in various tissues was analyzed by kinetic differentiation mode of HPLC.

**【Results】** After Al exposure, Al was found to accumulate in the brain, kidney and femur. Localized Al deposition in brain was significantly decreased by the administration of 2.4mg/body of Chinese parsley as shown in Fig.1. The similar results were obtained in femur (Fig.2). Surprisingly, Al levels in femur on Chinese parsley administered group were lower than that on control.

**【Conclusion】** Orally administered Chinese parsley is effective at reducing the deposition of Al in the tissues. These findings suggest the possibility that Chinese parsley may be useful as a natural antidote for Al intoxication.

Fig.1 Effect of Chinese parsley on Al

Fig.2 Effect of Chinese parsley on Al

concentration in the brain

concentration in the femur

L1(1,2-dimethyl-3-hydroxypyrid-4-one) : a chelating agent used for positive control

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Preventive effect of *Coriandrum sativum* (Chinese parsley) on localized lead deposition in ICR mice.

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The preventive effect of *Coriandrum sativum*, Fam. UMBELLIFERAE (Chinese parsley) on lead deposition was investigated in male ICR mice given lead (1000 ppm) as lead acetate trihydrate in drinking water for 32 days. Administration of Chinese parsley to mice by gastric intubation was performed for 25 days from day 7 after the start of lead exposure up to the end of the experiment. The mice were then sacrificed for comparison of lead distribution. The lead reached its highest concentration in the femur but localized lead deposition in the femur was significantly decreased by meso-2,3-dimercaptosuccinic acid (DMSA), a chelating agent used as a positive control to validate this experimental model. Administration of Chinese parsley also significantly decreased lead deposition in the femur and severe lead-induced injury in the kidneys. In addition, urinary excretion of delta-aminolevulinic acid (ALA) which is known to increase with lead intake was significantly decreased after administration of Chinese parsley. The MeOH extract of Chinese parsley also reduced lead-induced inhibition of delta-aminolevulinic acid dehydratase (ALAD) activity in vitro. These results suggest that Chinese parsley has suppressive activity on lead deposition, probably resulting from the chelation of lead by some substances contained in Chinese parsley.

Major Subject Heading(s) Minor Subject Heading(s) CAS Registry / EC Numbers

*Coriandrum*

Kidney Tubules, Proximal [drug effects]

Lead Poisoning [prevention & control]

Lead [pharmacokinetics]

Phytotherapy

Plant Extracts [therapeutic use]

Kidney Tubules, Proximal [pathology]

Mice, Inbred ICR

Mice

Porphobilinogen Synthase [metabolism]

Tissue Distribution

0 (Plant Extracts)

7439-92-1 (Lead)

EC 4.2.1.24 (Porphobilinogen Synthase)

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Essential oils from dill (*Anethum graveolens* L.), coriander (seeds of

Coriandrum sativum L.), cilantro (leaves of immature C. sativum L.) and eucalyptus (Eucalyptus dives) were separated into heterogeneous mixtures of components by fractional distillation and were analyzed by gas chromatography-mass spectroscopy. Minimum inhibitory concentrations against gram-positive bacteria, gram-negative bacteria and Saccharomyces cerevisiae were determined for the crude oils and their fractions. Essential oil of cilantro was particularly effective against Listeria monocytogenes, likely due to the presence of long chain (C6-C10) alcohols and aldehydes. The strength and spectrum of inhibition for the fractions often exceeded those determined in the crude oils. Mixing of fractions resulted in additive, synergistic or antagonistic effects against individual test microorganisms.

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Role of mercury (Hg) in resistant infections & effective treatment of Chlamydia trachomatis and Herpes family viral infections (and potential treatment for cancer) by removing localized Hg deposits with Chinese parsley and delivering effective antibiotics using various drug uptake enhancement methods.

[Omura Y](#), [Beckman SL](#). Heart Disease Research Foundation, New York, USA.

### **Abstract**

The authors found that antibiotics used to treat various infections often were ineffective in the presence of abnormal localized deposits of heavy metals like Hg and Pb, which were often observed to co-exist with Chlamydia trachomatis, Herpes Simplex Types I & II, Cytomegalovirus(CMV), and other micro-organisms. Our earlier research revealed that despite rigorous treatment with antibiotics together with various drug uptake enhancement techniques, subjects who had been treated for Chlamydia trachomatis infections, seemingly successfully with disappearance of their symptoms, were often experiencing recurrences within several months after completion of their treatment despite taking precautions against reinfection. Careful examination of the entire body of these symptom-free patients with the Bi-Digital O-Ring Test revealed that the Chlamydia trachomatis had retreated to 3 approximately 5 hiding places with localized increase in uric acid levels: 1) sublingual caruncle, 2) a small round area in the right and/or left axillae, 3) the genitals (Corona Glandis area of the Glans Penis at the Fossa Navicularis of the urethra in the male, and near the orifice of the urethra in the female), 4) Insulin-like Growth Factor positive horizontal lines, particularly above and below the knees, 5) the maxillary, ethmoid and frontal sinuses and the horizontal lines at the base of the nostrils (particularly small areas where Insulin-like Growth Factors exist). We found that all these areas contain Insulin-like Growth Factors I & II which are reduced in the presence of infection. Even when drug uptake of antibiotics was selectively increased in these 3 approximately 5 areas by various drug uptake enhancement methods developed by the 1st author, still the infection persisted. In the spring of 1995, use of Chinese parsley for successful elimination of Hg deposits existing in various organs of the first author as the result of the decay of radioactive Thallium 201 injected for cardiac SPECT, was accidentally discovered after eating Vietnamese soup, which happened to contain Chinese parsley, also called cilantro. We also found Chinese parsley accelerates the excretion of Hg, Pb, and A1 from the body through the urine. Our subjects were given a course of antibiotics (Doxycycline for Chlamydia trachomatis infection) or anti-viral agents (EPA with DHA for Herpes Family Viruses) together with Chinese parsley. Since these vegetable/herbs were eaten, the amount of effective substance absorbed varied and some people did not like the taste of these relatively large amounts of either cooked or raw parsley or its juice, but together with effective antibiotics delivered by drug uptake enhancement methods to the infected areas, the substances worked synergistically, rapidly reducing the generalized symptoms and infection. The micro-organisms retreated to the 3 approximately 5 areas listed above where, with continued treatment, they were significantly reduced, but not completely eliminated. Because of these problems, a pharmaceutical company was asked to produce a Chinese parsley table containing a controlled amount in a highly absorbable form. When 11 subjects were treated with Doxycycline for Chlamydia trachomatis infection, or anti-viral agents (EPA with DHA) for Herpes Family Viruses, drug uptake enhancement methods to selectively increase delivery of the drugs to the affected areas, and Chinese parsley tablets to remove the heavy metal deposits, the last traces of the infections and clinical symptoms disappeared completely. Therefore we hypothesized that the infectious micro-organisms mentioned above, somehow utilize the Hg or Pb to protect themselves from what would otherwise be effective antibiotics, and/or that heavy metal deposits in some way make antibiotics ineffective. Since the micro-organisms retreat to areas in which Insulin-like Growth Factors I & II normally exist, they may be utilizing them for their own growth and multiplication. These phenomena ma

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**Significant mercury deposits in internal organs following the removal of dental amalgam, & development of pre-cancer on the gingiva and the sides of the tongue and their represented organs as a result of inadvertent exposure to strong curing light (used to solidify synthetic dental filling material) & effective treatment: a clinical case report, along with organ representation areas for each tooth.**

[Omura Y](#), [Shimotsuura Y](#), [Fukuoka A](#), [Fukuoka H](#), [Nomoto T](#).

Heart Disease Research Foundation, New York, USA.

### **Abstract**

Because of the reduced effectiveness of antibiotics against bacteria (e.g. Chlamydia trachomatis, alpha-Streptococcus, Borrelia burgdorferi, etc.) and viruses (e.g. Herpes Family Viruses) in the presence of mercury, as well as the fact that the 1st author has found that mercury exists in cancer and pre-cancer cell nuclei, the presence of dental amalgam (which contains about 50% mercury) in the human mouth is considered to be a potential hazard for the individual's health. In order to solve this problem, 3 amalgam fillings were removed from the teeth of the subject of this case study. In order to fill the newly created empty spaces in the teeth where the amalgams had formerly existed, a synthetic dental-filling substance was introduced and to solidify the synthetic substance, curing light (wavelength range reportedly between 400-520 nm) was radiated onto the substance in order to accelerate the solidifying process by photo-polymerization. In spite of considerable care not to inhale mercury vapor or swallow minute particles of dental amalgam during the process of removing it by drilling, mercury entered the body of the subject. Precautions such as the use of a rubber dam and strong air suction, as well as frequent water suctioning and washing of the mouth were insufficient. Significant deposits of mercury, previously non-existent, were found in the lungs, kidneys, endocrine organs, liver, and heart with abnormal low-voltage ECGs (similar to those recorded 1-3 weeks after i.v. injection of radioisotope Thallium-201 for Cardiac SPECT) in all the limb leads and V1 (but almost normal ECGs in the precordial leads V2-V6) the day after the procedures were performed. Enhanced mercury evaporation by increased temperature and microscopic amalgam particles created by drilling may have contributed to mercury entering the lungs and G.I. system and then the blood circulation, creating abnormal deposits of mercury in the organs named above. Such mercury contamination may then contribute to intractable infections or pre-cancer. However, these mercury deposits, which commonly occur in such cases, were successfully eliminated by the oral intake of 100 mg tablet of Chinese parsley (Cilantro) 4 times a day (for average weight adults) with a number of drug-uptake enhancement methods developed by the 1st author, including different stimulation methods on the accurate organ representation areas of the hands (which have been mapped using the Bi-Digital O-Ring Test), without injections of chelating agents. Ingestion of Chinese parsley, accompanied by drug-uptake enhancement methods, was initiated before the amalgam removal procedure and continued for about 2 to 3 weeks afterwards, and ECGs became almost normal. During the use of strong bluish curing light to create a photo-polymerization reaction to solidify the synthetic filling material, the adjacent gingiva and the side of the tongue were inadvertently exposed. This exposure to the strong bluish light was found to produce pre-cancerous conditions in the gingiva, the exposed areas of the tongue, as well as in the corresponding organs represented on those areas of the tongue, and abnormally increased enzyme levels in the liver. These abnormalities were also successfully reversed by the oral intake of a mixture of EPA with DHA and Chinese parsley, augmented by one of the non-invasive drug-uptake enhancement methods previously described by the 1st author, repeated 4 times each day for 2 weeks.

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