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Metals

Why and how to remove them safely



Cytotoxic, immunological and carcinogenic effects as well as effects on metabolism have been scientifically proven for various metals such as mercury, gold, platinum, copper, cobalt, aluminum, iron, chromium, [1-10]. Metal constituents can usually be detected throughout the body within a few days after ingestion

Basically, you need to distinguish between three metal-related stress directions:

- 1. The toxicity of the material (toxicity):**
The highly toxic amalgam particularly plays a prominent (decisive) role here. The heavy metals containing mercury, copper, tin and silver bind in ionized form to sulfur-containing proteins, enzymes, cofactors and cell membranes (sulfhydryl groups). This covalent bonding completely blocks the function of an enzyme. Moreover, metal ions from all dental alloys are dissolved in an aqueous medium (saliva) and thus corrode. You could say they rust. It also results in a flow of current
- 2. The immunological component:**
None of the dental metals actually have a function in the human body. Every metal is virtually seen as a foreign body by the body's own immune system and can thus also trigger an allergic reaction. This process is individual and completely independent of the quantity or number of metal crowns, inlays or implants. The cell forms antibodies to the metal or the compound resulting from the metal and cell (Hapten effect), which plays an important role in the development of autoimmune diseases such as MS, Hashimoto Thyroiditis, etc.
- 3. The electrical component:**
In this age of mobile phone transmission, WLAN, radar and various authorities network, one is inevitably exposed to different frequencies and electromagnetic radiation. The metal restorations and titanium implants used in the oral cavity now act as small antennas with transmitter and receiver effect which can sensitively interfere with the nervous system. The radiation is amplified in an uncontrolled manner resulting in the heating up of surrounding tissue. The effects on the body are therefore uncontrollable.

Different materials have different effects on the body

Amalgam

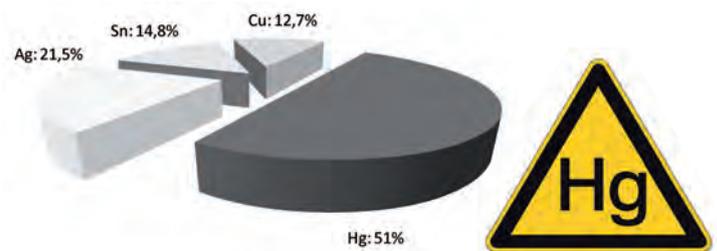
Different materials have different effects on the body. Amalgam is routinely used in most dental practices even today. On the one hand, because it is a material that is easy to process and lasts long and on the other hand, because it is subsidized by health insurance companies, so it is free of charge. .

In practice, amalgam must be disposed of as a highly toxic hazardous waste after removal. This fact alone should call for concern. Amalgam consists of 50% mercury (Hg), which, contrary to the widely-held opinion, is not strongly bonded within the filling after the mixing.

A certain amount of mercury vapor is released daily by chewing, gnashing, brushing the teeth and drinking hot or cold drinks. The whole thing plays out at the level of microgram but if one considers the fact that one molecule of Hg can destroy nerve cells, this should not to be underestimated. Hg is considered to be the most toxic non-radioactive element and in many cases, it surpasses all other known elements, such as lead, cadmium and arsenic many times over [11-13]. In animal studies, pathological changes were detected in the brain within 14 days of using amalgam [14-15].

Every day, approximately 2-3 µg of mercury vapor is released per filling and this happens over an average wearing period of 20 years. We can therefore talk of low-dose, chronic poisoning. In numerous studies, an approximately 2- to 5-fold increase of mercury in blood and urine was observed in living amalgam users; in examinations on deceased patients, 2 to 12-fold increase in the quantities of Hg

was found in different body tissues. According to these studies, amalgam is the main source of mercury contamination in the human body [5.16-35]. Mercury is known to mimic any symptom and is not tolerable in the body for precisely these reasons. The human body is extremely intelligent and if possible, it stores the fat-soluble toxins in the metabolic inactive connective or adipose tissue. However, in athletic people or persons with a low body fat content, the toxins are often deposited in the nerve tissue or the brain. Infants are particularly at risk during lactation or in the mother's womb during pregnancy, since Hg is entirely transferred via the placenta. The amount of mercury in breast milk and amniotic fluid is clearly correlated with the amount of maternal amalgam fillings [36-47]. Since amalgam fillings are the main source of poisoning with mercury and other heavy metals, these should be removed, whether the user is chronically ill or for preventive reasons.



The standard composition of an amalgam filling is: 51% mercury (Hg), 21.5% silver (Ag), 14.8% tin (Sn) and 12.7% copper (Cu) (depending on the manufacturer's specifications).

Dental metal alloys

Dental metal alloys such as gold, nickel, palladium, silver, platinum or titanium are not biologically present in the human organism. However, they are routinely used in dental alloys. An aggravating factor is the fact that, according to the Medical Devices Act (MPG), all components of a material under 1% do not have to be specified. In contrast to the highly toxic mercury in the amalgam, the patient-specific immune system plays a decisive role for the abovementioned metals. Inevitably, these metals are foreign bodies that are either tolerated or attacked depending on the aggressiveness of the immune system. As a result, low-dose inflammation occurs, sometimes only locally detectable via gum disease, massive allergies or even autoimmune diseases. Unfortunately, the cause of these diseases is mostly unknown and the therapy is symptomatic. The chronic, low-dose activation of the immune system consumes at least 30% of the daily energy. Chronic fatigue is not a rare symptom. Some patients feel the immune response every morning with limb pain, laziness and even slightly elevated temperatures. They almost always feel a bit "sick".

In addition, there is the so-called battery effect (galvanic element), resulting in increased corrosion of the metal ions and deposition on endogenous proteins, cell membranes and enzymes, as well as an antenna effect of all metals. Classic scenario: gold crown next to amalgam filling - the battery effect.

A battery results when two different metals are placed in a conductive solution. According to the electrochemical series of voltages, the nonferrous metal ions dissolve in solution and flow towards the nobler metal, thereby releasing electrons which result in a flow of current. Saliva is an optimal electrolytic solution due to its high mineral content. A classic example is a gold crown next to an amalgam filling or gold mounting on a titanium implant. This is referred to as a galvanic element or the battery effect. These comparatively high dental mouth currents lead to corrosion of the metals during the wearing period which inevitably correlates with the problems of the toxicity of the metals per se.

In addition, the increasing electrosensitivity of the patients due to the exponentially increasing proliferation of microwaves through WLAN and mobile phone transmission.

It is important to know that metals in the body act like small antennas that can completely interfere with the cell's potential for action. Fields of tension develop which interfere with the central nervous system. Inevitably one is exposed to electro smog everywhere [48]. The standard absorption rate of electromagnetic fields can be increased by 400-700 fold by using a mobile phone (ringing or SMS reception) in combination with metals in the mouth [49]. Electrogalvanism and resulting electrosensitivity can often be the cause of lack of concentration and memory loss, insomnia,

non-specific symptoms such as stabbing pain or pressure in the chest, unexplained heart palpitations, tinnitus and hearing loss, etc. [50]



The classic scenario: A gold crown next to an amalgam filling – the battery effect.

Titanium

Titanium intolerance

According to Dr. Volker von Baehr (IMD-Berlin), 15 to 20% of the population is intolerant to titanium [51], mainly due to the massive use of titanium dioxide as a filler or dye in medications, dietary supplements, personal care products, cosmetics, chewing gum and toothpaste. The tissue-specific phagocytic cells react with an increased non-specific immune response to the titanium oxide particles generated by abrasion during the implantation process. This results in an increased oxidative stress [52-53]. In a study conducted by Weingart, titanium oxide particles were found in regional lymph nodes [54]. The lymphatic and immune system is thus additionally burdened. Contribution in the development of autoimmune responses is also discussed [55]. Radar et al were able to show that zirconium oxide particles of the same size do not induce an inflammatory immune response (TNF-) in a phagocytic

cell culture medium in return [56]. As with all other metals, titanium implants also represent small antennas for electromagnetic fields. In a clinical study by Fujii, patients with titanium implants experienced problems of balance triggered by the amplification of electromagnetic waves through the titanium implants [57].

Therapy

As therapy for the above reasons, it is understandable that all metals should be removed in the course of consistent biological dental medicine in order not to only relieve the immune system but also to reduce micro-currents and interactions with the electromagnetic fields. The first step is to remove all metals and replace them with temporary ones. Only the titanium implants are left initially.

Amalgam removal under protective measures

Support the body's detoxification performance so that the body is ideally prepared for the upcoming amalgam removal

Start with our detoxification protocol (DTX a. Dr. Dominik Nischwitz) 14 days before the scheduled session, or stick to the specifications of your referring environmental medicine practitioner or medical practitioner. Despite maximum protection measures in the removal of the metals, it is not possible to avoid a small amount of mercury vapor entering the body. Due to the increased nutrient supplementation, your body now has the capability to optimally capture and also excrete these toxins. The risk of increased poisoning during the removal is thus minimized. Our detox protocol supports the body in its detoxification function, with the aim of

being able to carry out amalgam removal without further problems. It should by no means be considered as a complete heavy metal recovery. This can only begin after the mouth has been completely biologically cleaned up (metal and interference field remediation). Please consult your physician or medical practitioner.

Most errors are usually committed during amalgam removal. Usually the dentist, since he does not know about the above-mentioned problems (not university doctrine), simply drills the filling out without any protective measures. However, a very large amount of highly



Protective measures for professional amalgam removal: Rubber dam - Gold seal nasal mask - Clean-up suction cups. (Not shown: Oxygen nasal probe and IQAir®).



toxic, inorganic mercury vapor (HgO) is produced. It is not uncommon for patients to come up with neurological complaints, chronic fatigue, joint and muscle aches, or other new symptoms just after such a routine amalgam removal. For this reason, the removal of the amalgam fillings under absolute protection measures is indispensable. .

From the author's experience, the following protocol has proven to be successful:

- *Rubber dam (rubber cloth - protection against chips and fragments)*
- *Clean-up suction cups - additional protection against mercury vapor.*
- *Careful boring at low speed to avoid toxic mercury vapor.*
- *Oxygen supply via a nasal probe - oxidizes mercury → additional protection for the lungs*
- *Nasal mask coated with gold - absorbs mercury vapor*
- *Chlorella algae insert after removal of the amalgam → binds mercury still present in the tooth*
- *depending on the state of health. The teeth are finally restored (ceramic or composite) or provisionally filled with cement (glass ionomer cement filling)*
- *Optional: infusion with highly dosed vitamin C and other micronutrients*

Metal removal (crowns and bridges made of high gold or non-precious metal alloys)

All metals are removed at least under the rubber dam in order to prevent the absorption of metal particles over the mucous membranes and the gastrointestinal tract. In the case of severe illnesses or at the request of the patient, it is also possible to apply maximum protective measures (see amalgam removal) during general metal removal.

Titanium removal

With the help of a titanium stimulation test (blood test), one can check whether there is an intolerance to titanium dioxide prior to titanium removal. Also, an intolerance can already be suspected visually in the mouth on the basis of an inflamed tissue around the implant. If this is the case, the implants should be removed during treatment and replaced by a fully ceramic implant. With a special device, it is possible in most cases to rotate the titanium implants backwards from the jaw without provoking an otherwise common

bone defect. Depending on the health condition of the patient, a fully ceramic implant can then be placed directly without first having to heal the bone.

If no electrosensitivity is triggered by the existing implants, they should remain in place. The buildup on the implant will however, be replaced by a fully ceramic (abutment) buildup in order to avoid a local current flow.

What to Consider as a patient:

During the days prior to amalgam removal or metal removal, all harmful nutritional influences should be avoided. This means: abstaining from coffee, alcohol, tobacco, table sugar, sweeteners, trans fats, gluten and dairy products. Water, healthy fats, protein, vegetables and salads in all variations as well as a healthy lifestyle with lots of sleep, exercise and sun have a positive effect.

Diet four weeks before surgery: Avoid tobacco, caffeine, alcohol, simple sugars, saturated fat, gluten and dairy products. Please follow the nutritional guidelines we have provided in the Food Design brochure.

For info on supplements the Detox Protocol and the Food Design brochure can be found on the download page on the DNA website.

Your cooperation is crucial. Please take the supplements and medications as directed and follow the indicated dietary recommendations. Please take enough liquid (2-3 liters of still water). After the metal removal, you should continue to support your body with the necessary nutrients and fill your reserve. In the course of the complete removal, the first step is the remediation of the interference field (removal of the root-treated teeth and osteolysis in the jaw bone (see interference field remediation).

After complete reconstruction of the oral cavity and at the earliest 6-8 weeks after the last operation, the complete detoxification of the heavy metals can begin with your treating physician or curative practitioner.



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