A Brief Introduction to Biological Dentistry
What patients, people and health practitioners should know about the jaw, the teeth and the occlusion

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**Dentistry and Biological Dentistry**

**Dentistry:** non-biological dentists, such as those freshly graduated from dental school, have learned that dental fillings are a “class 2 device:” they are attached to the outside of the body and therefore do not have to be regulated or studied for safety like anything else that goes inside the body. What you put in a tooth doesn’t matter.

What is **Biological Dentistry**?
The amazing discovery, that the teeth are actually part of the human body. What you put in a tooth and in the mouth does matter!
This is the mouth of a mom with ME/CFIDS, MCS, insomnia, short term memory loss and alab supported diagnosis of Lyme Disease. She gave birth to her first child, Daniel, who was later diagnosed as „autistic“. He became neurotypical with a mercury/tin focused detox programme.
The constant 24/7 exposure to microwave/cellphone radiation from either WiFi, nearby cellphone tower (less than 2 km) or chordless phone in the home drives the release of toxic mercury vapour from dental amalgam fillings.


„Increased Release of Mercury from Dental Amalgam Fillings due to Maternal Exposure to Electromagnetic Fields as a Possible Mechanism for the High Rates of Autism in the Offspring: Introducing a Hypothesis“

Gh. Mortazavi; M. Haghani; N. Rastegarian; S. Zarei; and S.M.J. Mortazavi
Mercury

• Mercury in the mouth – does not stay in the mouth

• All amalgam fillings contain about 50% mercury – often more than 1 gram. This is enough to bring down an elephant according to a well published toxicologist. Every 7 years this filling evaporates 50% of the mercury. 80% of that stays in the body with a half life of 32 years. At room temperature mercury is a gas – it travels. The end-point is the CNS
Mercury outgases from the „silver“ fillings for at least 50 years. Up to 80 % end up in the CNS with a half life of over 30 years (in a healthy person)
Mercury Toxicity CNS Symptoms: identical to symptoms of persistent LymeDisease

- anxiety/nervousness, often with difficulty in breathing
- restlessness
- exaggerated response to stimulation
- fearfulness
- emotional instability
  lack of self control
  fits of anger, with violent, irrational behavior
- loss of self confidence
- indecision
- shyness or timidity, being easily embarrassed
- Loss of memory
- inability to concentrate
- lethargy/drowsiness
- insomnia
- mental depression, despondency
- withdrawal
- irritability
- suicidal tendencies
- manic depression
Mercury as a cofactor in persistent Lyme and pre-condition for Alzheimer’s Disease


- **Solution:** metal free teeth. Conscious ocean fish consumption. Avoid Hg containing vaccines. Detox
This study by M.Vimy DDS should have ended the last amalgam war.
Dental amalgam is a mercury-based filling containing approximately 50% of metallic mercury (Hg(0)). Human placenta does not represent a real barrier to the transport of Hg(0); hence, fetal exposure occurs as a result of maternal exposure to Hg, with possible subsequent neurodevelopmental disabilities in infants. This study represents a sub-study of the international NIH-funded project "Early Childhood Development and polychlorinated biphenyls Exposure in Slovakia". The main aim of this analysis was to assess the relationship between maternal dental amalgam fillings and exposure of the developing fetus to Hg. The study subjects were mother-child pairs (N=99). Questionnaires were administered after delivery, and chemical analyses of Hg were performed in the samples of maternal and cord blood using atomic absorption spectrometry with amalgamation technique. The median values of Hg concentrations were 0.63 µg/l (range 0.14-2.9 µg/l) and 0.80 µg/l (range 0.15-2.54 µg/l) for maternal and cord blood, respectively. None of the cord blood Hg concentrations reached the level considered to be hazardous for neurodevelopmental effects in children exposed to Hg in utero (EPA reference dose for Hg of 5.8 µg/l in cord blood). A strong positive correlation between maternal and cord blood Hg levels was found (rho=0.79; P<0.001). Levels of Hg in the cord blood were significantly associated with the number of maternal amalgam fillings (rho=0.46, P<0.001) and with the number of years since the last filling (rho=-0.37, P<0.001); these associations remained significant after adjustment for maternal age and education. Dental amalgam fillings in girls and women of reproductive age should be used with caution, to avoid increased prenatal Hg exposure.

Myelin sheets bind heavy metals
Metals bind to sulfur (SH) groups and change their configuration. Such cells are recognized by immune system as “foreign” and are attacked.

**Own cells**

- SH

**Changed cells**

- Hg, Ag, Au, Ni, Ti
- S-Hg, S-Ag, S-Au, S-Ni, S-Ti

**Does not stimulate the immune system**

- Zzz...

**Stimulates the immune system**

- → Allergy
- → Autoimmunity

007... With license to kill!
Macrophages cannot handle metals and act as transporters of metal ions throughout the body.
DIAGNOSIS of metal toxicity

- History and symptoms
- Immune reaction-based tests (MELISA, skin testing, LDA)
- Neurology (hyperreflexia, clonus, Babinski, burning, numbness, etc.)
- Apheresis
- Oligo Scan
- Whole blood
- Red cells
- White cells
- Hair
- Stool
- Serum
- Urine: Hg speciation by Quicksilver labs or DMSA/DMPS/EDTA challenge test
- Urine porphyrins
- ART
- EDS
Correct IAOMT Amalgam Removal: how were your client‘s fillings taken out?

Rubberdam

Swedish suction device
Urinary porphyrins

<table>
<thead>
<tr>
<th>Porphyrin</th>
<th>nmol/l</th>
<th>nmol/gCr</th>
<th>%</th>
<th>nmol/gCr</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uroporphyrins I &amp; III (UP)</td>
<td>37</td>
<td>33</td>
<td>7.9%</td>
<td>8-20</td>
<td>Increased rate</td>
</tr>
<tr>
<td>Heptacarboxy porphyrin (7cxP)</td>
<td>4.2</td>
<td>3.8</td>
<td>0.9%</td>
<td>2.5-4.5</td>
<td>Average Rate</td>
</tr>
<tr>
<td>Hexacarboxy porphyrin (6cxP)</td>
<td>1.3</td>
<td>1.1</td>
<td>0.3%</td>
<td>0.5-1.5</td>
<td>Average Rate</td>
</tr>
<tr>
<td>Pentacarboxy porphyrin (5cxP)</td>
<td>5.8</td>
<td>5.2</td>
<td>1.2%</td>
<td>2-4</td>
<td>Slightly increased rate</td>
</tr>
<tr>
<td>Precoproporphyrin (PrCP)</td>
<td>18.0</td>
<td>16.0</td>
<td>3.8%</td>
<td>5.9</td>
<td>Increased rate</td>
</tr>
<tr>
<td>Coproporphyrins I &amp; III (CP)</td>
<td>405</td>
<td>362</td>
<td>66.3%</td>
<td>100-200</td>
<td>Increased rate</td>
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<tr>
<td>PrCP/UP</td>
<td>4.48</td>
<td></td>
<td></td>
<td>0.2-0.5</td>
<td></td>
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<tr>
<td>(5cxP+PrCP)/(UP+7cxP) ratio</td>
<td>0.6</td>
<td></td>
<td></td>
<td>0.3-0.6</td>
<td></td>
</tr>
<tr>
<td>PrCP/5cxP</td>
<td>3.1</td>
<td></td>
<td></td>
<td>1.5-3</td>
<td></td>
</tr>
<tr>
<td>PrCP/CP</td>
<td>4.4</td>
<td></td>
<td>%</td>
<td>2-5</td>
<td></td>
</tr>
<tr>
<td>CP / UP</td>
<td>10.90</td>
<td></td>
<td></td>
<td>5-9</td>
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</table>

Interpretation

Urinary Porphyrin Profile suggestive a moderate mercury toxic effect on bodily physiology high in coproporphyrin

Urinary porphyrin profile ia a powerful biochemical tool in diagnosis of Intoxication associating sensitivity, specificity and quantificity

- Sensitivity- because heme biosynthesis is highly sensitive to inhibition by many inorganic toxicants such as Mercury, Lead, Arsenic, Aluminium as well as organic agents: chlorinated benzene, biphenyls (PCB), dioxins (TCDD) and also alcohol.
- Specificity- because nearly each toxic generates a specific urinary porphyrine excretion pattern for example: Biphenyls, Dioxins, Aluminium inhibit an early enzyme on porphyrin biosynthesis pathway Uro-Decarboxylase, Mercury inhibits Copro-oxidase and L.
- Quantification or quantitative relationship between increase of specific porphyrins species and toxic or heavy metal body burden with a high degree of correlation designating it as a reliable biomarker for chelation therapy.

urinary creatinine 1120 mg/l
Oligoscan: toxic metal levels in the matrix

Date: 2016/01/26
Male 65 years
Date of Birth: 1950/10/14
Blood group: A
Weight: 75 Kg
Size: 1m 74

Heavy Metal Test Report

<table>
<thead>
<tr>
<th></th>
<th>Result</th>
<th>Normal</th>
<th>High -</th>
<th>High +</th>
<th>Excess</th>
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<tbody>
<tr>
<td>Aluminium (Al)</td>
<td>0.01137</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Antimony (Sb)</td>
<td>0.00243</td>
<td></td>
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<tr>
<td>Silver (Ag)</td>
<td>0.01384</td>
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<tr>
<td>Arsenic (As)</td>
<td>0.00487</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium (Ba)</td>
<td>0.00624</td>
<td></td>
<td></td>
<td></td>
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<td>Beryllium (Be)</td>
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<td>Bismuth (Bi)</td>
<td>0.00774</td>
<td></td>
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</tr>
<tr>
<td>Cadmium (Cd)</td>
<td>0.01244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mercury (Hg)</td>
<td>0.01744</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Nickel (Ni)</td>
<td>0.00350</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Platinum (Pt)</td>
<td>0.00235</td>
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<td></td>
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<tr>
<td>Lead (Pb)</td>
<td>0.00678</td>
<td></td>
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</tr>
<tr>
<td>Thallium (Tl)</td>
<td>0.00151</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thorium (Th)</td>
<td>0.00093</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Overall intoxication

0% 85% 100%

Suspicion of the blockage for the elimination of heavy metals due to the possible lack of sulfur conjugation.

0% 75% 100%
Selma, former dental hygienist, 38 year old mom, with psychotic episodes. Institutionalized several times. Autistic son. Both pos. In Western Blot for Lyme. Both „cured“ with cilantro tincture (Coriandolo, KiScience) and ionic foot baths

11/3/2006  DMPS 500 mg post provocation Hg – 18 (mildly elevated)
Comparison of Chelating Agents DMPS, DMSA and EDTA for the Diagnosis and Treatment of Chronic Metal Exposure

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International Board of Clinical Metal Toxicology, Netherlands.
Micro Trace Minerals Laboratory, Roehrenstr 20, 91217 Hersbruck, Germany.
Trace Minerals International Laboratory, P.O.Box 4613, Boulder, Colorado, 80302, US.

ABSTRACT
Several chelating agents are presently used among environmental physicians to diagnose and treat a chronic metal overexposure. We evaluated and compared the binding capacity of the most common chelating agents DMPS (2, 3-dimercapto-1-propanesulfonic acid), DMSA (dimercaptosuccinic acid), also called Succimer) and EDTA (ethylene diamine tetraacetic acid) for the potentially toxic metals Antimony (Sb), Arsenic (As), Cadmium (Cd), Lead (Pb) and Mercury (Hg). Secondly, we evaluated how the nutrient elements Calcium (Ca), Copper (Cu) and Zinc (Zn) are affected by the chelating agents tested.

Results: The intravenous application of DMPS is most suitable for the diagnosis and treatment of a single or multiple metal exposure, involving the metals Sb, As and Hg. Both EDTAs (NaCaEDTA and NaEDTA), administered intravenously, are the agents of choice for Cd, while Pb can be chelated using DMSA, DMPS, or the EDTAs. Both EDTAs have a strong Zn binding ability, but only NaEDTA is suitable for binding appreciable amounts of Ca. DMPS best binds Cu.

Conclusion: The intravenous application of DMPS is most useful for the diagnosis of multiple metal overexposure. It is also the treatment of choice for Sb, As and Hg and has the strongest Cu binding ability of the chelators tested.

Keywords: DMPS; DMSA; EDTA, arsenic; cadmium; copper; lead; mercury.
# Urine Toxic Elements Post DMPS Challenge

<table>
<thead>
<tr>
<th>Date</th>
<th>mcg Hg/24 hrs</th>
<th>ppb (post DMPS 3 mg/kg i.v push)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/23/93</td>
<td>27.8</td>
<td>27.8</td>
</tr>
<tr>
<td>6/24/93</td>
<td>99.0</td>
<td>99.0</td>
</tr>
<tr>
<td>9/21/93</td>
<td>49.4</td>
<td>49.4</td>
</tr>
<tr>
<td>12/23/93</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>4/94-8/94</td>
<td></td>
<td>four treatments with neuraltherapy</td>
</tr>
<tr>
<td>8/24/94</td>
<td><strong>1514.4</strong></td>
<td><strong>1954.0</strong></td>
</tr>
</tbody>
</table>

**A.H.: 46 year old woman**  
Dx: severe depression, multiple neurological symptoms (muscle weakness, numbness, whole body pain)

<table>
<thead>
<tr>
<th>Date</th>
<th>mcg Hg/24 hrs</th>
<th>mcg Hg/g creatinine (post DMPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/97-4/98</td>
<td></td>
<td>treatment with psychological intervention (APN/MFT)</td>
</tr>
<tr>
<td>1/24/1998</td>
<td>2100</td>
<td>2700</td>
</tr>
<tr>
<td>2/3/1998</td>
<td>2900</td>
<td></td>
</tr>
<tr>
<td>4/3/1998</td>
<td>1500</td>
<td>930</td>
</tr>
<tr>
<td>4/18/1998</td>
<td>370</td>
<td></td>
</tr>
</tbody>
</table>
Stellate Ganglion Technique

1. Palpation with middlefinger

2. Thumb and index fixate the syringe

3. Aspiration and injection
Chlorella und Metallbindung

Cadmium

Uran

Blei
- Protective effects of chlorella vulgaris in lead exposed mice infected with Listeria monocytogenes  M.Queiroz et al International Immunopharmacology 3 (2003) 889-900

Quecksilber
- Klinghardt,D. :Algenpraeparat hilfreich bei der Amalgamausleitung; Erfahrungsheilkunde Band 48, Heft 7, Juli 1999

Anti-Aging
Chlorella in pregnant and breastfeeding mothers
we can help create healthy babies in a toxic world

• “Effect of chlorella pyrenoidosa on fecal excretion and liver accumulastion of polychlorinated dibenzo-p-dioxin in mice” Chemosphere 2005;59 297-304

• “Maternal-fetal distribution and transfer of dioxins in pregnant women in Japan, and attempts to reduce maternal transfer with Chlorella (Chlorella pyrenoidosa) supplements” S.Nakano et al Chemosphere, April 2005

• “Chlorella Pyreneidosa supplementation decreases Dioxin and increases Immunoglobulin A concentrations in breast milk” Shiro Nakano et al J Med Food 10 (1) 2007, 134-142)

Cilantro aka Coriander aka Chinese Parsley

• What is cilantro?
  – A European herb in the parsley family
  – Accelerates the elimination of mercury, lead, and aluminum through the urine
  – Improves effectiveness of anti-viral meds and antibiotics in subjects with localized deposits of Hg, Al and Pb which often co-exist with Borrelia, chlamydia, herpes, and cytomegalovirus organisms.

• Cilantro is very effective in removing lead, **mercury and aluminum**

• Cilantro is effective in removing **radioactive metals** from the body and can be used safely and effectively for exposed workers:
Toxic metal ions in urine and hair after provocation with a 30 drops *energized cilantro* tincture tid for 6 weeks + ionic footbath (KiScience.com)
Metal Detox: conventional Medical treatment

- **Ca-EDTA** slow push/fast drip 50 mg/kg, not to exceed 3 gm, $T^{1/2}$ about 30-45 minutes, 6 hr. urine collection

- **DMPS challenge**: IV: 3-5 mg/kg (250 mg max), slow push (5-10 min.) **Oral**: 10 mg /kg BW (5 mg/kg children), empty stomach(empty bladder). Withhold food about 2 hrs. Encourage ~ 0.5L fluid over next few hrs. Collect all urine for 6 hrs.

- **DMSA challenge (oral):** 20-30 mg DMSA/kg BW as oral bolus on empty stomach ($\leq$ 2 gms). Withhold food about 2 hrs. Encourage ~ 0.5L fluid over next few hrs. Collect all urine for 6 hrs. J Nutr Envir Med (1998) 8:219-231

- **D-Pencillamine** protocol- 500mg three times per day 2 days per week (R.Jaffe PhD)

- **Desferal**: reconstitute vial with 10 ml distilled water. Inject half segmentally subcutaneously around the abdomen. The other half 2-3 days later. Keep refrigerated

- **IV Vitamin C**: 37-50 grams in 500 ml distilled water with 10 ml Ca gluconate

- **Glutathione**: 600-4000 mg 1-3x weekly, IV push (always include i.m or i.v Magnesium once twice weekly)

- **Alpha-lipoic acid**: 600 mg in normal saline (250 cc) over 1 hr

- **Phospholipids** (Lipostabil): 2 ampoules diluted with client’s blood (50:50) given slow IV over 3 minutes

- **conventional NaEDTA protocol** (ACAM)

- **Zinc DTPA**: 1 ampoule once weekly i.v.
Detox for both Aluminium and Mercury

- Slowly titrate Coriandolo tincture (=organic cilantro plus 7 flower stem cell extracts) from 1 drop twice daily to 2 dropperfull (=30 drops) three times daily (t.i.d) 30 min before each meal. Always combine with Polmolo (aluminium) and KiBrain (repair)
- Binders: use chlorella if tolerated. Start with medium dose of 8 tabl (250 mg each) t.i.d 5 min after taking Cilantro. Increase during times of crisis, Herxheimer reaction or if no change is perceived. Max dose: 40 tabl. 3 times daily
- Curcumin tincture for deeper mobilization (1 pipette before each meal)
- If Chlorella is not tolerated, use Lava Vitae (special zeolite): start ½ capsule twice daily between meals, slowly increase to 2 caps t.i.d away from all food or vitamins
- Ionic footbath (IonCleanse fromKiScience) 2-4 times weekly for 30 minutes
- Continue the binders. There will be unpredictable waves of release
- High dose melatonin (Señer, G.et al: “Melatonin protects against mercury induced oxidative tissue damage”. Basic and Clinical Pharmacology&Toxicology Vol 93, Dec 2003, pp 290-296)
- Colon hydrotherapy plus sauna tx is the golden way
- If patient has problems: add massage, or better, lymphatic drainage massage. Best: neural therapy (procaine injections to affected ganglia, segmental treatment of liver, small intestine and kidney)
- Follow up i.v.s if needed or affordable: Vit C (37.5-50 gms), alpha lipoic acid (600 mg), glutathione (600 mg), i.v or i.m magnesium, aminoacids
- Check saliva (6.7)and urine pH (6.2). Consider tri-salts
The Occlusion

- The bite is key to a healthy and long life
I consider the Beagle study below  still the most convincing piece of work, demonstrating that correcting the occlusion is not an expensive hobby but a significant part of an integrative health protocol!


Systemic effects of the peripheral disturbance of the trigeminal system: Influences of the occlusal destruction in dogs.
Teruaki Sumioka
Department of Anesthesiology. Kyoto Prefectural University of Medicine

Abstract: Although there is an increasing amount of information pertaining to intracranial pathways of the trigeminal nerve, its clinical significance still remains unclear in many ways. I assumed that dental disorders including malocclusion would lead to the disturbance of the central nervous system via the trigeminal nerve. Based on this belief, this study was conducted to find out systemic effects of the occlusal destruction by grinding teeth unilaterally in dogs. As the result: abnormal involuntary movement and symptoms of autonomic failure were observed.
These experimental results indicate that the trigeminal nuclear complex contains not only the functions of the sensory relay in the face and the control of chewing movement, but it is likely that it modulates motor, especially postural control and autonomic system. It is believed that the dental aspects, especially occlusion, play an important role for the proper functioning of the trigeminal system.
Key 'Words: Trigeminal system, Occlusal destruction, Postural control, Involuntary movement, Autonomic failure.
How does the Bite affect Brain Detox?

PALATE DEFORMITY BEFORE EXPANSION

SAME PALATE AFTER EXPANSION

12 mm

23 mm
The Psychology of the Bite: 16 year old girl. Sexually abused in earlier years. Desperate need for protection.
Separation between mom and dad, when patient was 6 years old
Mom and dad fought for years, dad disappeared, girl raised by foster parents
Dominating father: mother was abused and severely oppressed
The Bionator / Prof. Balters
Chewing Ability and Tooth Loss: Association with Cognitive Impairment in an Elderly Population
Duangjai Lexomboon, Mats Trulsson, Inger Wårdh & Marti G. Parker
Journal of the American Geriatrics Society, online ahead of print 4 October 2012
A team comprised of researchers from the Department of Odontology and the Aging Research Center (ARC) at Karolinska Institute and from Karlstad University have looked at tooth loss, chewing ability and cognitive function in a random nationwide sample of 557 people aged 77 or older.
They found that those who had difficulty chewing hard food such as apples had a significantly higher risk of developing cognitive impairments. This correlation remained even when controlling for sex, age, education and mental health problems, variables that are often reported to impact on cognition. Whether chewing ability was sustained with natural teeth or dentures also had no bearing on the effect.
The Cavitation Issue

• NICO lesions and other cavitations are the most common cause of fatigue and contribute to any illness known. Root filled teeth are not a long term solution:
  
• More than half the teeth studied with apical periodontitis had bacteria in tubules all the way to the cemental junction.
  
  — Peters et al  *JOE* 2001 27:76-81

• 205 of 256 species isolated from human dentinal tubules were obligate anaerobes.
  

• Four of ten specimens with apical periodontitis were heavily invaded by yeasts.
  
Systemic Effect of NICO-RANTES (Regulated on Activation Normal T-cell Expressed and Secreted) (17 NICO-Samples)
Rantes may be an indicator (other than ALT testing) for the illness-causing biotoxin production in the cavitation and for retroviral activity.

RANTES and fibroblast growth factor 2 in jawbone cavitations: triggers for systemic disease?  Johann Lechner, Volker von Baehr

Abstract: Regulated upon activation, normal T-cell expressed, and secreted (RANTES) and fibroblast growth factor (FGF)-2 were found at high levels in the JCs tested. Other cytokines could not be detected at excessive levels.

Discussion: The study confirms that JC is able to produce inflammatory messengers, primarily RANTES, and, secondarily, FGF-2. Both are implicated in many serious illnesses. The excessive levels of RANTES/FGF-2 in JC patients with amyotrophic lateral sclerosis, multiple sclerosis, rheumatoid arthritis, and breast cancer are compared to levels published in medical journals. Levels detected in JCs are higher than in the serum and cerebrospinal fluid of amyotrophic lateral sclerosis and multiple sclerosis patients and four-fold higher than in breast cancer tissue.

Conclusion: This study suggests that JC might serve as a fundamental cause of IDs, through RANTES/FGF-2 production. Thus, JC and implicated immune messengers represent an integrative aspect of IDs and serve as a possible cause. Removing JCs may be a key to reversing IDs. There is a need to raise awareness about JC throughout medicine and dentistry.

Keywords: RANTES/CCL5, fibroblast growth factor, FGF-2, bead-based Luminex analysis, osteolytic degenerated jaw bone, NICO, systemic signaling pathways
Bartonella

Bartonella quintana in a 4000-year-old human tooth


DRANCOURT Michel (1) ; TRAN-HUNG Lam (1) ; COURTIN Jean (2) ; DE LUMLEY Henry (2) ; RAOULT Didier (1) ; Unité des Rickettsies, CNR UMR 6020, IFR 48, FRANCE

Laboratoire de Préhistoire du Muséum National d'Histoire Naturelle, CNRS UMR 6569, Faculté de Médecine, Université de la Méditerranée, Marseille, FRANCE

Abstract

• Bacteria of the genus Bartonella are transmitted by ectoparasites (lice, fleas, ticks) and have mammalian reservoirs in which they cause chronic, asymptomatic bacteremia. Humans are the reservoir of B. quintana, the louse-borne agent of trench fever.

• We detected DNA of B. quintana in the dental pulp of a person who died 4000 years ago.
Bartonella (cat scratch disease)


Background. Cat-scratch disease, or CSD, results from inoculation of the gram-negative bacillus Bartonella henselae via a cat’s scratch. A regional lymphadenitis, which usually is cervical, develops and may progress to suppuration. It is necessary to differentiate CSD from other lymphadenopathies.

Case Description. A patient who had close contact with a cat subsequently developed a localized, suppurative cervical lymphadenitis. As B. henselae was identified in 1992, the authors were able to confirm the existence of CSD serologically. Surgical drainage resulted in a successful resolution of the disease process.

Clinical Implications. As patients with CSD may be seen in the dental office, an awareness of its symptomatology can prevent unnecessary dental intervention and facilitate early treatment.

Patients with submandibular swellings often are examined in dental offices because a dental etiology is suspected. Many of these submandibular swellings represent lymphadenopathies. Proper diagnosis requires an ability to differentiate the many causes, which include oral sepsis, skin infections, tuberculosis, leukemia, neoplasms and cat-scratch disease, or CSD. Familiarity with these diverse processes is incumbent on the dentist. Thorough examinations and laboratory investigations usually lead to a diagnosis.

Diagnosing cat-scratch disease is problematic because it masquerades as other causes of cervical lymphadenopathy.

It is estimated that 70,000 new cases of CSD occur each year. Although systemic manifestations have been reported, cats are a natural reservoir for the causative microorganism. Because infected cats rapidly develop antibodies, they appear healthy despite a bacteremia that can be present for at least 12 months. A positive serology has been reported in up to 56 percent of North American cats. The etiologic organism, transmitted to humans by a cat’s scratch, lick or bite, was identified in 1992 by Regnery and colleagues as the gram-negative bacillus Bartonella henselae.

Because some patients who have CSD will be examined in the dental office, we present a case report and review of CSD to heighten dentists’ awareness of signs, symptoms and methods of diagnosis.
Implants??

Titanium in the jaw acts as antenna for microwave radiation

Brain proteome response following whole body exposure of mice to mobile phone or wireless DECT base radiation

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Abstract:
The objective of this study was to investigate the effects of two sources of electromagnetic fields (EMFs) on the proteome of cerebellum, hippocampus, and frontal lobe in Balb/c mice following long-term whole body irradiation. Three equally divided groups of animals (6 animals/group) were used; the first group was exposed to a **typical mobile phone**, at a SAR level range of 0.17–0.37 W/kg for 3 h daily for 8 months, the second group was exposed to a **wireless DECT base** (Digital Enhanced Cordless Telecommunications/Telephone) at a SAR level range of 0.012–0.028 W/kg for 8 h/day also for 8 months and the third group comprised the **sham**-exposed animals. Comparative proteomics analysis revealed that long-term irradiation from **both EMF sources** altered significantly (p < 0.05) the **expression of 143 proteins** in total (as low as 0.003 fold downregulation **up to 114 fold overexpression**). Several neural function related proteins (i.e., Glial Fibrillary Acidic Protein (GFAP), Alpha synuclein, Glia Maturation Factor beta (GMF), and apolipoprotein E (apoE)), heat shock proteins, and cytoskeletal proteins (i.e., Neurofilaments and tropomodulin) are included in this list as well as proteins of the brain metabolism (i.e., Aspartate aminotransferase, Glutamate dehydrogenase) to nearly all brain regions studied. Western blot analysis on selected proteins confirmed the proteomics data. The observed **protein expression changes may be related to brain plasticity alterations**, indicative of **oxidative stress in the nervous system** or involved in **apoptosis** and might potentially explain human health hazards reported so far, such as **headaches, sleep disturbance, fatigue, memory deficits, and brain tumor long-term induction** under similar exposure conditions.
Titanium implants are like Russian Roulette – there are almost always long term negative health consequence – its allergenic, toxic and a microwave antenna. Zirconium oxide has none of these problems.

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Abstract: Historically, titanium has maintained the reputation of being an inert and relatively biocompatible metal, suitable for use in both medical and dental prosthesis. There are many published articles supporting these views, but there is recent scientific evidence that titanium, or its corrosion by-products, may cause harmful reactions in humans. It is important for all medical and dental professionals to understand the implications, complexities, and all potential pathways of exposure to this metal. These exposures are not only from the environment, but also through various commonly used products in medicine that are often completely overlooked. These external (intermittent) and internal (constant) exposures have an impact on whole body health. This review examines possible harmful effects, risks, and often ignored potential complications of titanium exposure to human health.
Keywords: Titanium dental implants; Nanoparticles; Electromagnetic Frequency
When I graduated from my work with pain patients, I moved on to working with clients with chronic complex illness. I had to learn a few more lessons. My clinic is today the Sophia Health Institute in Woodinville just outside Seattle. I have 8 physicians working with me and all of them are “jaw and tooth literate”.

We learned

1. Most - if not all - **people today are toxic**. The teeth are no longer the biggest or only source of toxicity. Its insecticides, food preservatives, flame retardants and others. But ahead of all of them is aluminum toxicity, a by-product of the global climate control effort. Aluminum is the main source of inflammation in our vascular and nervous system. The effect of all toxins is cumulative and synergistic.

2. **The more toxic the terrain, the more pathogens** and parasites in a system.

3. Cavitations in the jaw are associated with the production of RANTES – inflammatory cytokines that are associated with MS, ALS and other neurological illness and cancer. **Cavitations are no longer tolerated** by us humans in the greater context of systemic toxicity. RANTES is an indicator for retroviral activity.

4. **Gum disease is a symptom of systemic illness** and has to be addressed that way (systemic antimicrobials, detoxification, gut health, parasites, liver problems)
5. Our immune system becomes either **habituated and tolerant to** whatever is used in **dental restorations** and we lose the ability to eliminate similar toxins, or we become **allergic** to it with a host of medical problems. Many restoration materials contain aluminum, leading to the inability to excrete aerosolized aluminum. Many dental plastics contain methyl-acrylate, leading to methylation and demethylation problems.

6. **Loss of vertical tooth height** with age decreases acetylcholine in the brain. Memory goes! If the bite goes with tooth loss, so does the brain. We have to restore the bite respecting the vertical height of the restoration.

7. **Titanium** in the jaw is structurally great, perfect – and yet not always a good idea! It’s a microwave antenna in an already electro-polluted general environment. Its allergenic in up to 25% of people (www.Melisa.org) that had the implants for several years. It is metal too close to the brain.

8. **Zirconium oxide** is a non-conductive ceramic material, also used as a healing stone in several shamanic traditions (it occurs naturally). The new generation of Swiss implants is strong, implants well with fewer problems and well tolerated by most (www.SwissBioHealth.com). It is light conductive and can be treated with laserlight for better outcomes, better osseous integration and healthy signalling to related organs.
Sophia Health Institute Woodinville, Washington; Medical Director: Dietrich Klinghardt, MD, PhD

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