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Swiss Excellence Health Center
Integrative Biological Medicine and Dentistry

„The role of dental field of disturbances (foci) in systemic cancer formation“ Myth or fact ?

DDr. Josef Vizkelety

Welcome !

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Causes for Cancer

Increase animal protein intake e.g. dairy (milk, cheese) products: contains casein protein and Methionin, Leucin, Valin, Isoleucin (BCAA) → activates mTOR and also Insulin & IGF 1 and therefore increases mTOR. Also contains micro RNA21 → activates cancerous growth

Short chain carbohydrates: contains Glucose, Fructose→ activates IGF 1→ increases mTOR activity. Cancerous cells obtain TKTL 1 (Transketolase Like Enzyme) → produces from carbohydrates Acetyl-CoA and lactic acid

Pesticides, resin compounds (BPA,Phtalate,Acrylate), cosmetics (Parabene), air pollutants, smoking, food additives (Aspartame, Neotame, Sucralose)

Lack of physical exercise, increased stress, toxins –> increased oxidative, nitrosamine stress

Vital substance deficiency: e.g. folic acid, Vitamin A,B,C,D,E, Selenium, Zinc ! (CAVE: Gum Disease)

Contaminated vaccines e.g. containing HERV (Human endogenous retrovirus) → activate oncogenes

Bad Omega 6 fatty acids, met-acrylate and trans-fatty acids → increases pro-inflammatory response and cancerous growth

Drugs like immune modulating agents, pioglitazon, sartane, sedatives, sexual hormones, PPI's

Increased Salt (Sodium/Na) intake & Potassium (K) deficiency → decreased cell membrane potential and increased extracellular lactic acid accumulation → increased extracellular immune resistance !

Increased alcohol intake → Increased iron release from Ferritin → increased oxidative stress

Radiation (radioactive, x-rays, EMF)

Decreased natural sun light exposure (UV B), increased artificial light exposure

Increased exposure to metals and bacterial pathogens e.g lead, arsenic, mercury, aluminum, iron, copper and bacteria's of the orange and red groups → promotes cancerous growth !!!

Toxins from dental foci → from root treated teeth, periodontitis and jaw lesions → increased chemokine release → e.g. RANTES/CCL5, IL 1beta & TNF alpha, IL 6 (proinflammatory markers) → promotes cancerous cell growth !!!!

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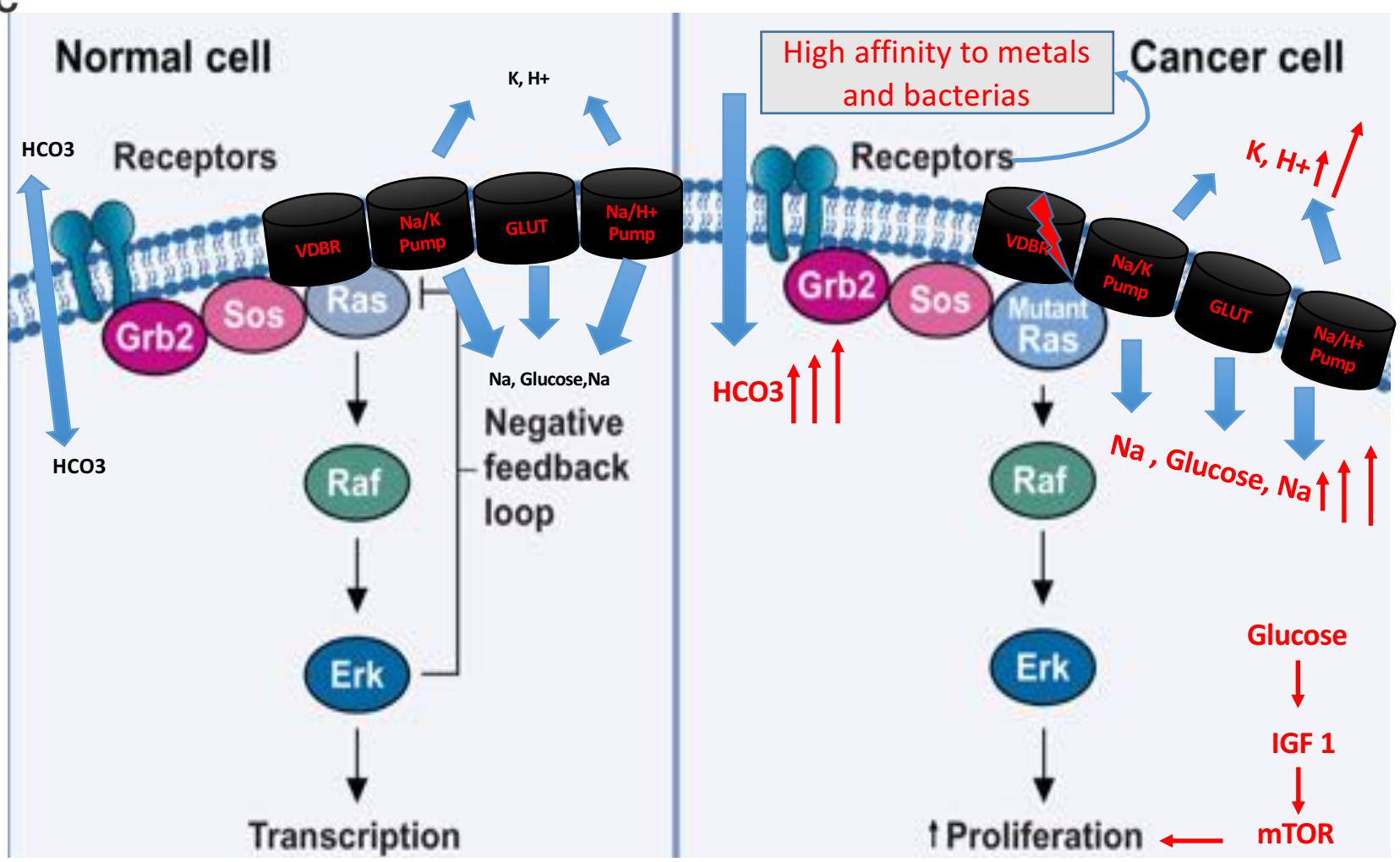
Cell mechanism



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Nutrition

NO carbohydrates! NO wheat, gluten or starch containing seeds ! NO salt intake ! Few soy products (fermented). Only fruits with little fructose content ! No or very little meat proteins (egg yolk, wild caught fish, or fish from natural sweet water environment)

1. 80-100% **vegan fresh foods (**green leaves, much Chlorophyll, e.g. from tree leaves, buds, endives, salads & lettuce, (Romana, Eisberg) oak leaves, parsnip, parsley, chives, broccoli, savoy, turnip cabbage, cauliflower, fennels, cucumber, avocados, tomatoes, natto or kimchi)

   20% **red roots** (e.g. Jerusalem artichoke ,carrots, radish, scorzonera),

   mushrooms, seeds (sesame, linseed, hemp seeds),

   legumes (lentils, chickpeas, mungbeans),

   egg yolk

   berries (raspberries, blackberries, blueberries, lemons, grapefruit (pink), green papaya and durian)

a. **Mix all together and drink as freshly squeezed raw juice (1-2l) per day, use water to dilute, sweeten it with stevia leave powder. Fill it into bottles and keep it refrigerated. You can also order/get all vegan plants in powder form called "Best of Greens" (http://www.nutricosmos.de)**

b. **Only use cold pressed olive oil (non hardened) for cooking/baking/grilling. High quality linseed oil or olive oil for salads ! Use as sugar replacement in form of: Stevia Syrup, Stevia powder**

Take for 2-4 weeks without any compromises !

CAVE! In case of mercury fillings, NICO lesions, endodontic teeth , only add 50% into daily nutrition !

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Nutritional Supplement

1. **Ketogenic diet:** **Amino Base powder** (contains all vitamins, minerals and amino acids, for regular cell functions, biologically harvested from vegan proteins!!!!). Order from (http://www.DrJacobs.Info) → 1-2x daily 4-5 cups, mix it into the cocktail or drink it separately, dilute with water or almond milk. **Tumor cells can't utilize vegan proteins as energy source !**

    a. Alkalinize your body (pH:7.5-8) : **Dr. Jacobs Alkaline powder** (http://www.DrJacobs.info) or **Sodium bicarbonate** (backing powder) from any pharmacy >> pH of 7,5 to 8,0 recommended (urine dip stick testing 3x day).

    b. Antioxidants: **Astaxanthin, CurcuSyn, Deep Purple, Deep Freezed Garlic and Chlorenergy**, from (http://www.biopure.eu), take 2x 1 capsule/cup per day , mix into cocktail or take it separately.

2. **Vitamine D3** (**Dekrestol**, Distributor mibe GmbH Arzneimittel, Germany) **70.000-100.000 I.E.** daily + **Super K** (**K1 1000µg , K2-MK4 1000µg, K2-MK7 100µg) 10 capsules** daily. Super K has to be taken to inhibit hypercalcaemia ! Check blood for Vitamin D3, (1,25-OH) D3, blood value should be > 70ng/dl (between 70-100) ! (order Super K from http://www.amazon.de and look for Super K from producer Life Extension)

3. **Magnesium lactate powder : 700mg 2x 1 tee spoon/cup** (http://www.heidelberger-chlorella.de) **+ Potassium 3g/ day** (pharmacy)

4. **Selenium: 300 µg/day** , therefore 3 capsules (http://www.heidelberger-chlorella.de) , say prior to chemotherapy **1000µg** !

5. **5 MTHF (on/off switch) : 5mg/day, 1 capsule** (www.yourhealthbasket.co.uk/ Thorne)

Castiglioni, S. and Maier, J. (2011) Magnesium and cancer: a dangerous liaison. Magnes Res. 24(3): pp. S92-100. Wark, P., Lau, R., Norat, T., and Kampman, E. (2012) Magnesium intake and colorectal tumor risk: a case-control study and meta-analysis. Am J Clin Nutr. Speich, M., Auget, J., and Arnaud, P. (1989) Correlations between magnesium and heavy metals in blood and sixteen tissues of rabbits. Magnes Res. 2(3): pp. 179-182. Gropper, S., Smith, J., and Groff, J. (2009) Advanced Nutrition and Human Metabolism. Belmont, CA: Wadsworth. Anghileri, L., Collery, P., Coudoux, P., and Durlach, J. (1981) Experimental relationships between magnesium and cancer. Magnesium Bull. 3(1): pp. 1-5. Blondell, J. (1980) The anticancer effect of magnesium. Medical Hypothesis. 6(1): pp. 863-871. Czapp, K. (2010) Magnificent Magnesium [online]. Available at: http://www.westonaprice.org/health-topics/abcs-of-nutrition/magnificent-magnesium/ [Accessed 20 June 2015]. Lucock M, et al. Methylation diet and methyl group genetics in risk for adenomatous polyp occurrence. BBA Clin. 2015 Jan; 107-12. PMID: 26673393 Zhang XF, et al. Association between MTHFR 677C/T and 1298A/C gene polymorphisms and breast cancer risk. Genet Mol Res. 2015 Dec; 14(4): 16425-30. PMID: 26662439 Kumar P, Yadav U, and Rai V. Methylenetrahydrofolate reductase gene C677T polymorphism and breast cancer risk: Evidence for genetic susceptibility. Meta Gene. 2015 Oct; 6: 72-84. PMID: 26629412

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Detox

- **Chelation therapy for toxins after all metals and inflammations have been removed from oral cavity**
- **Special infusions**
- **Ozone therapy**
- **Systemic & local Procain**
- **Colonhydrotherapy**
- **Whole Body Hyperthermia**
- **Active Fever Therapy**
- **Organopetides**

- Period of fasting, natural UV-B sun light exposure, early sleeping time to increase Melatonin production, light therapy (no blue light), increased physical actvity/sports

- Dental restoration (upper/lower jaw) – remove all metals, jaw cavitations, manage periodontal disease & root canal treated teeth

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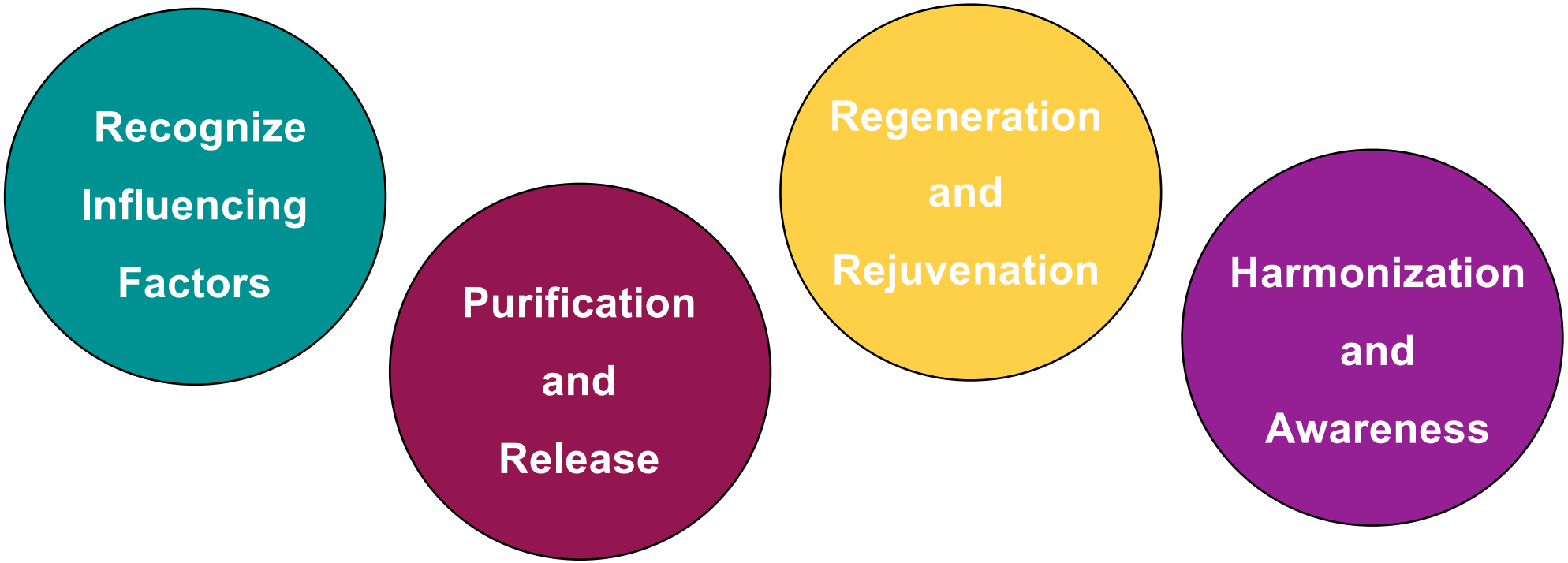
The 4 pillars of „Integrative Biological Medicine“



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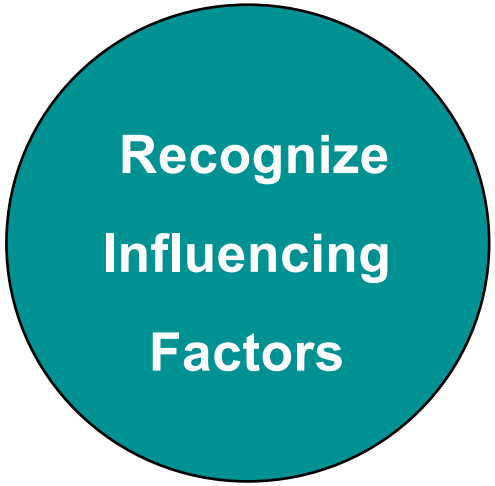
The 4 pillars of „Integrative Biological Medicine“



in Dentistry

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Diagnostics

1. Blood
2. Oral sampling
3. OPG/CBCT/Cavitat

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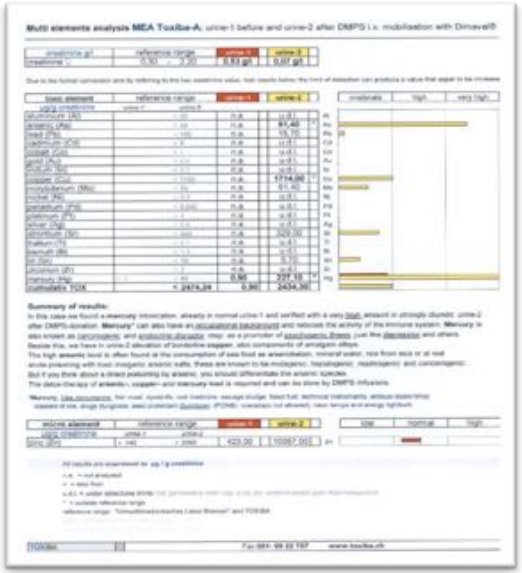
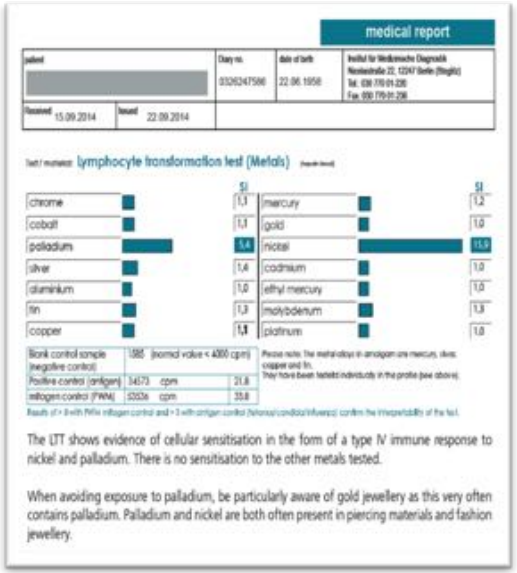
Blood: Lymphocytes

(Degree of allergic/hypersensitivty reaction)

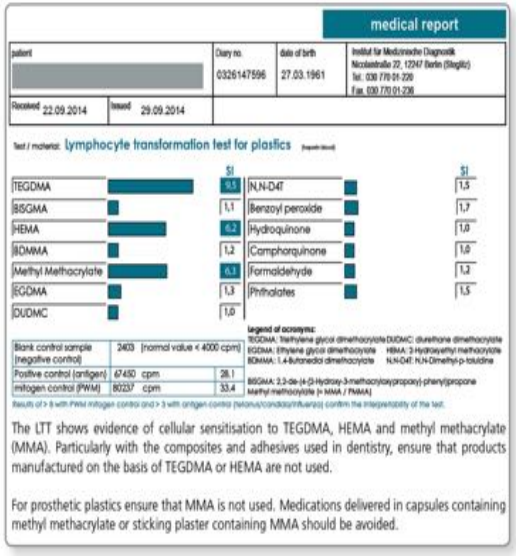
Toxiba Test (DMPS)

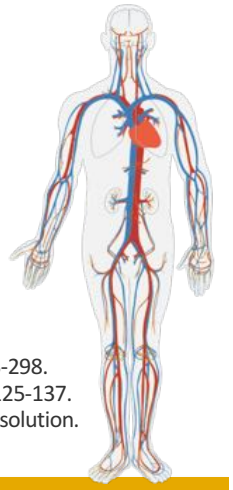


LTT Metals



LTT composite fillings





1. Everness KM, Gawkrodger DJ, Botham PA, Hunter JA. The discrimination between nickel-sensitive and non-nickel-sensitive subjects by an in vitro lymphocyte transformation test. Br J Dermatol. 1990;122:293-298.
2. Farrer DG, Hueber SM, McCabe MJ Jr. Lead enhances CD4+ T cell proliferation indirectly by targeting antigen presenting cells and modulating antigen-specific interactions. Toxicol Appl Pharmacol. 2005;207:125-137.
3. Hagemann T, Schlutter-Bohmer B, Allam JP, Bieber T, Novak N. Positive lymphocyte transformation test in a patient with allergic contact dermatitis of the scalp after short-term use of topical minoxidil solution. Contact Dermatitis. 2005;53:53-55.

LTT- MELISA

Laboratoire MGD

page 1/6

Test report
85829

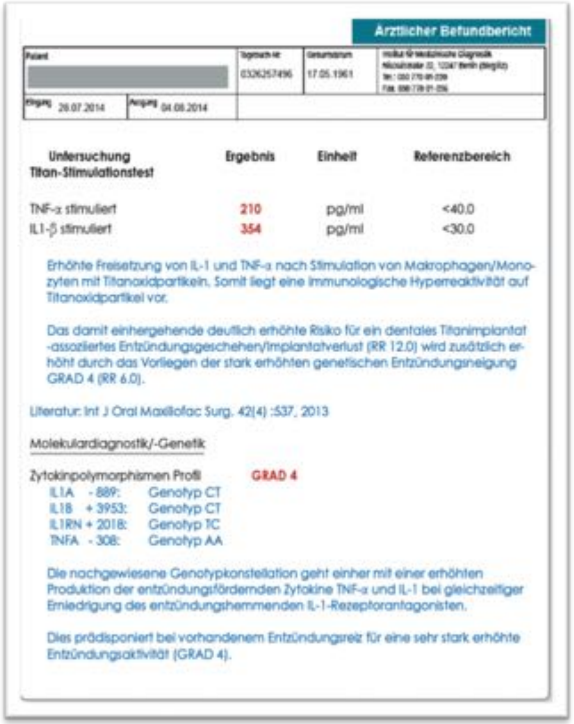
TEST LTT-MELISA®

Test report for: [redacted]
Neg.Ctrl: 8'295 Test date: 19-Jul-16
Referred by: Dr Josef VIZKELETY, Paracelsus Klinik Lustmühle AG, Postfach 162, 9053 Teufen AR
Date of birth: 18-Sep-79
Sex: Male

	Code	Substance (in order of reaction)	SI	Comments	Microscopic observations
	PWM	Positive control	18.3	Positive control	+++++
1	Ni	Nickel I	7.5	Positive	++
		Nickel II	2.7	Weakly positive	+
		Nickel III	4.5	Positive	+
2	Nb	Niobium I	1.6		
		Niobium II	4.0	Positive	+
3	V	Vanadium I	3.5	Positive	+
		Vanadium II	1.3		
4	TiO2	Titanium dioxide I	2.6	Weakly positive	+
		Titanium dioxide II	0.5		
		Titanium dioxide III	0.5		
5	Zr	Zirconium powder I	0.6		
		Zirconium powder II	0.6		
		Zirconium powder III	0.9		
6	TiSO4	Titanium sulphate I	0.4		
		Titanium sulphate II	0.4		
		Titanium sulphate III	0.6		
7	CaTiO	CalciumTitanate I	0.4		
		CalciumTitanate II	0.5		
		CalciumTitanate III	0.6		
8	Al	Aluminium I	0.5		
		Aluminium II	0.5		

Microscopic observations
Positive to: Vanadium, Niobium, Nickel. Weakly positive to: Titanium dioxide. Negative to all other antigens tested.

TST



Ärztlicher Befundbericht

Eingang 28.07.2014 Ausgang 04.08.2014
Geburtsdatum 17.05.1961

Untersuchung Titan-Stimulationstest	Ergebnis	Einheit	Referenzbereich
TNF-α stimuliert	210	pg/ml	<40.0
IL1-β stimuliert	354	pg/ml	<30.0

Erhöhte Freisetzung von IL-1 und TNF-α nach Stimulation von Makrophagen/Monozyten mit Titanoxidpartikeln. Somit liegt eine immunologische Hyperreaktivität auf Titanoxidpartikel vor.

Das damit einhergehende deutlich erhöhte Risiko für ein dentales Titanimplantat-assoziiertes Entzündungsgeschehen/Implantatverlust (RR 12.0) wird zusätzlich erhöht durch das Vorliegen der stark erhöhten genetischen Entzündungsneigung GRAD 4 (RR 6.0).

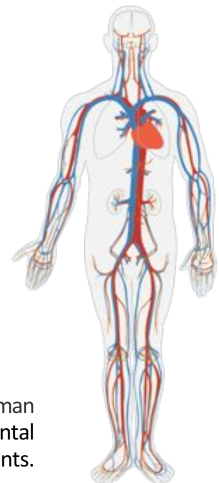
Literatur: Int J Oral Maxillofac Surg. 42(4) :537, 2013

Molekulardiagnostik/-Genetik

Zytokinpolymorphismen Profil GRAD 4
IL1A - 889: Genotyp CT
IL1B + 3953: Genotyp CT
IL1RN + 2018: Genotyp TC
TNFA - 308: Genotyp AA

Die nachgewiesene Genotypkonstellation geht einher mit einer erhöhten Produktion der entzündungsfördernden Zytokine TNF-α und IL-1 bei gleichzeitiger Erniedrigung des entzündungshemmenden IL-1-Rezeptorantagonisten.

Dies prädisponiert bei vorhandenem Entzündungsreiz für eine sehr stark erhöhte Entzündungsaktivität (GRAD 4).



1. Sterner T, Schütze N, Saxler G, Jakob F, Rader CP. Effects of clinically relevant alumina ceramic, zirconia ceramic and titanium particles of different sizes and concentrations on TNF-alpha release in a human macrophage cell line. Biomed Tech. 2004;49(12):340-344. 2.Assuma R, Oates T, Cochran D, Amar S, Graves DT. IL-1 and TNF antagonists inhibit the inflammatory response and bone loss in experimental periodontitis. J Immunol. 1998;160(1):403-409.. 3. Alvim-Pereira F, Montes CC, Mira MT, Trevilatto PC. Genetic susceptibility to dental implant failure: a critical review. Int J Oral Maxillofac Implants. 2008;23(3):409-416.

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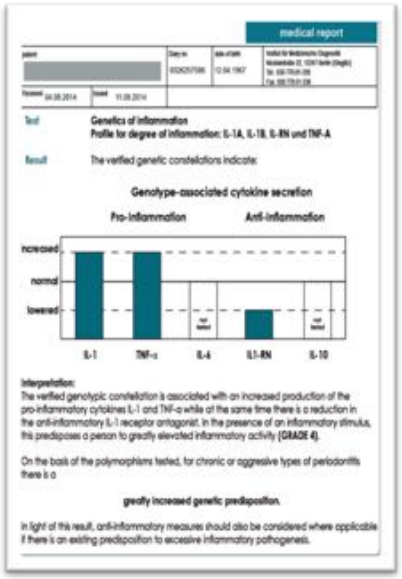
Blood: Cytokines

(Degree of inflammation)

Cytokine RCT



Cytokine Secretion

Cytokine RANTES

Reference:**Jacobi Gresser E et al.,** J Biol Regul Homeost Agents. 2015 Jan-Mar;29(1):73-84. Methyl mercaptan and hydrogen sulfide products stimulate proinflammatory cytokines in patients with necrotic pulp tissue and endodontically treated teeth. **Battharai G et al.,** PPARγ delivered by Ch-GNPs onto titanium surfaces inhibits implant-induced inflammation and induces bone mineralization of MC-3T3E1 osteoblast-like cells.Clin Oral Implants Res. 2013 Oct;24(10):1101-9. **Lechner J et al.,** Chemokine RANTES/CCL5 as an unknown link between wound healing in the jawbone and systemic disease: is prediction and tailored treatments in the horizon? EPMA J. 2015 May 6;6(1):10. +) Peripheral Neuropathic Facial/Trigeminal Pain and RANTES/CCL5 in Jawbone Cavitation. Evid Based Complement Alternat Med. 2015;2015:582520. + Hyperactivated Signaling Pathways of Chemokine RANTES/CCL5 in Osteopathies of Jawbone in Breast Cancer Patients-Case Report and Research. Breast Cancer (Auckl). 2014 May 21;8:89-96.

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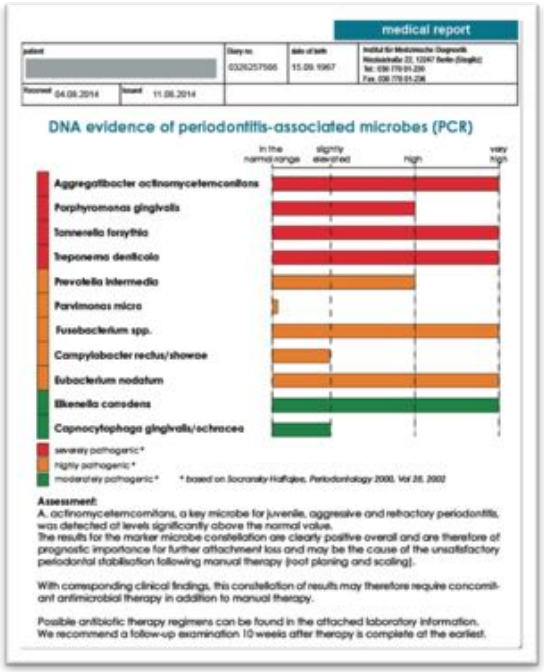
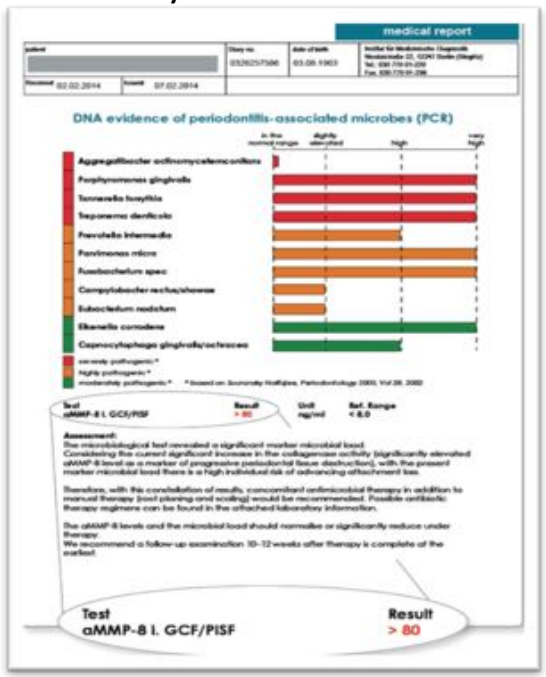
Oral sampling: Dental Flora

(Degree of inflammation)



Dental Flora



Dental Flora/Periodontitis/aMMP8

Reference: **Perrez Chaperro et al.,** The Current Weight of Evidence of the Microbiologic Profile Associated With Peri-Implantitis: A Systematic Review.J Periodontol. 2016 Nov;87(11):1295-1304. **Lorenz K et al.,** Evaluation of a novel point-of-care test for active matrix metalloproteinase-8: agreement between qualitative and quantitative measurements and relation to periodontal inflammation. J Periodontal Res. 2016 May 23.

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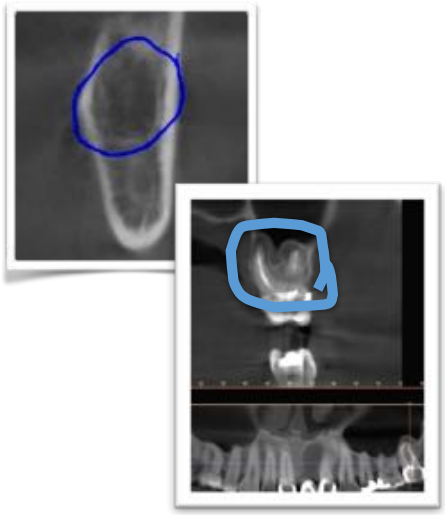
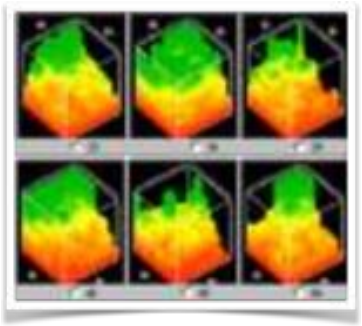
OPG/CBCT / Cavitat

(Degree of focal inflammation, infection)

OPG



better **DVT**
(3D scan)



CAVITAT scan (computer based ultrasonic device, evidence based, FDA approved)
—> **no changes**
—> **osteonecrotic areas**
—> **cavities**

Reference: **Lechner J et al.,** Validation of dental X-ray by cytokine RANTES - comparison of X-ray findings with cytokine overexpression in jawbone. Clin Cosmet Investig Dent. 2014 Aug 21;6:71-9. **De Paula-Silva FW et al.,**. Accuracy of periapical radiography and cone-beam computed tomography scans in diagnosing apical periodontitis using histopathological findings as a gold standard, J Endod. 2009 Jul;35(7):1009-1.2. **Shankland WE et al.,** Focal osteoporotic marrow defect: report of 100 new cases with ultrasonography scans. Cranio. 2004 Oct;22(4):314-9.

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Diagnostic Centers

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Mississauga, ON L5W 0B3
Tel 1-800-263-0801
Web www.melisacanada.com
www.rmalab.com
Email melisa@rmalab.com

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Pharmasan Labs
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54020
Tel +1 715 294 2144
Fax +1 715 294 3921
Web www.neurorelief.com
Email
marie.loughlin@neurorelief.com
Please note that testing must be ordered by an authorized healthcare provider

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http://www.melisa.org/contact-us/melisa-laboratories
http://www.imd-berlin.de/imd-verbund/berlin.html

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The 4 pillars of „Integrative Biological Medicine“

in Dentistry

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"Dental Aspects of Toxic Load"

Metals

Mercury and it´s safe removal

Systemic Detoxification

Non Surgical !

an approach to integrative biological healing aspects……..

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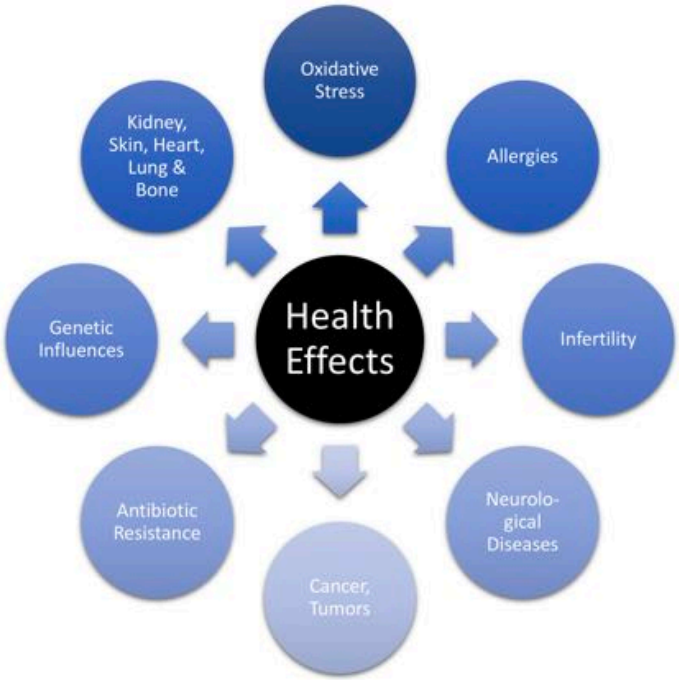
Dental Foci



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Metals

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Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2004 Nov;98(5):553-65.

Healing of oral lichenoid lesions after replacing amalgam restorations: a systematic review.

Issa Y[1], Brunton PA, Glenny AM, Duxbury AJ.

Author information

Abstract

OBJECTIVE: We sought to systematically review the literature related to oral lichenoid lesions (OLLs) and amalgam restorations.

STUDY DESIGN: Cohort and case-controlled studies (no randomized controlled trials or controlled clinical trials available) were reviewed with respect to inclusion criteria and data on patients with OLLs, treatment interventions, and the measurement of outcomes.

RESULTS: Fourteen cohort and 5 case-controlled trials met the criteria. The study population consisted of 1158 patients (27% male and 73% female; age range, 23-79 years). From 16% to 91% of patients had positive patch test results for at least 1 mercury compound. Of 1158 patients, 636 had to have their restorations replaced. The follow-up period ranged from 2 months to 9 1/2 years. Complete healing ranged from 37.5% to 100%. The greatest improvements were seen in lesions in close contact with amalgam.

CONCLUSIONS: Protocols must be standardized to obtain valid results. The replacement of amalgam restorations can result in the resolution or improvement of OLLs. Patch testing seems to be of limited value. The topographic relationship between an OLL and an amalgam restoration is a useful--but not conclusive--marker.

Interv Med Appl Sci. 2015 Jun;7(2):63-8. doi: 10.1556/1646.7.2015.2.4. Epub 2015 Jun 11.

Pathogenetic mechanisms of heavy metals effect on proapoptotic and proliferative potential of breast cancer.

Romaniuk A, Lyndin M, Moskalenko R, Kuzenko Y, Gladchenko O, Lyndina Y.

Abstract

MATERIALS AND METHODS: Chemical composition was studied with the help of the scanning electron microscope with energy-dispersion spectrometer. Immunohistochemical reaction showed the p53 and Ki-67 receptors expression. The study of DNA fragmentation was performed in agarose gel.

RESULTS: There was an interrelation between the accumulations of the trace elements with the degree of cancer malignancy. There were 85% of cases with positive reaction to Ki-67 and 40% cases with positive reaction to p53. We found a moderate correlation between the accumulation of microelements in the breast cancer tissue and the level of proliferative activity. We noted the combination of the increase of DNA fragmentation with the expression of p53 and Ki-67 receptors.

CONCLUSIONS: The trace elements can cause the initiation and the progression of the tumorous growth, which is expressed in the increased proliferation of tumor cells. This leads to the destabilization of the genetic material which can be expressed in the synthesis of mutant p53 protein. Finally, it leads to the block of apoptosis and regulatory effects of cells. This can cause the tumor progression and the destabilization of the genome, which is reflected in the increased DNA fragmentation.

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Biomed Res Int. 2016;2016:7825432. Epub 2016 Oct 10.

Advances in Understanding How Heavy Metal Pollution Triggers Gastric Cancer.

Yuan W[1], Yang N[2], Li X[2].

Author Information

Abstract

With the development of industrialization and urbanization, heavy metals contamination has become a major environmental problem. Numerous investigations have revealed an association between heavy metal exposure and the incidence and mortality of gastric cancer. The mechanisms of heavy metals (lead, cadmium, mercury, chromium, and arsenic) contamination leading to gastric cancer are concluded in this review. There are four main potential mechanisms: (1) Heavy metals disrupt the gastric mucosal barrier by decreasing mucosal thickness, mucus content, and basal acid output, thereby affecting the function of E-cadherin and inducing reactive oxygen species (ROS) damage. (2) Heavy metals directly or indirectly induce ROS generation and cause gastric mucosal and DNA lesions, which subsequently alter gene regulation, signal transduction, and cell growth, ultimately leading to carcinogenesis. Exposure to heavy metals also enhances gastric cancer cell invasion and metastasis. (3) Heavy metals inhibit DNA damage repair or cause inefficient lesion repair. (4) Heavy metals may induce other gene abnormalities. In addition, heavy metals can induce the expression of proinflammatory chemokine interleukin-8 (IL-8) and microRNAs, which promotes tumorigenesis. The present review is an effort to underline the human health problem caused by heavy metal with recent development in order to garner a broader perspective.

Biol Trace Elem Res. 2016 Dec;174(2):280-286. Epub 2016 May 5.

Quantitative Evaluation of Heavy Metals and Trace Elements in the Urinary Bladder: Comparison Between Cancerous, Adjacent Non-cancerous and Normal Cadaveric Tissue.

Abdel-Gawad M[1], Elsobky E[2], Shalaby MM[3], Abd-Elhameed M[4], Abdel-Rahim M[4], Ali-El-Dein B[4].

Author Information

Abstract

The role of heavy metals and trace elements (HMTE) in the development of some cancers has been previously reported. Bladder carcinoma is a frequent malignancy of the urinary tract. The most common risk factors for bladder cancer are exposure to industrial carcinogens, cigarette smoking, gender, and possibly diet. The aim of this study was to evaluate HTME concentrations in the cancerous and adjacent non-cancerous tissues and compare them with those of normal cadaveric bladder. This prospective study included 102 paired samples of full-thickness cancer and adjacent non-cancerous bladder tissues of radical cystectomy (RC) specimens that were histologically proven as invasive bladder cancer (MIBC). We used 17 matched controls of non-malignant bladder tissue samples from cadavers. All samples were processed and evaluated for the concentration of 22 HMTE by using Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES). Outcome analysis was made by the Mann-Whitney U, chi-square, Kruskal-Wallis, and Wilcoxon signed ranks tests. When compared with cadaveric control or cancerous, the adjacent non-cancerous tissue had higher levels of six elements (arsenic, lead, selenium, strontium, zinc, and aluminum), and when compared with the control alone, it had a higher concentration of calcium, cadmium, chromium, potassium, magnesium, and nickel. The cancerous tissue had a higher concentration of cadmium, lead, chromium, calcium, potassium, phosphorous, magnesium, nickel, selenium, strontium, and zinc than cadaveric control. Boron level was higher in cadaveric control than cancerous and adjacent non-cancerous tissue. Cadmium level was higher in cancerous tissue with node-positive than node-negative cases. The high concentrations of cadmium, lead, chromium, nickel, and zinc, in the cancerous together with arsenic in the adjacent non-cancerous tissues of RC specimens suggest a pathogenic role of these elements in BC. However, further work-up is needed to support this conclusion by the application of these HMTE on BC cell lines.

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Mercury, Gold, Platinum, Palladium, Silver, Copper, Nickel, Chrome, Cobalt, Molybdenium, Iron, Manganese, Zinc (used for root canal filling material) and Titanium

Physical attributes of dental metals lead to galvanic corrosion, oxidization and ion release (1,2,3)

ATSDR Agency for Toxic Substances & Disease Registry

A-Z Index A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

Priority List of Hazardous Substances

The ATSDR 2013 Substance Priority List

2013 RANK	SUBSTANCE NAME	TOTAL POINTS	2011 RANK	CAS RN
1	ARSENIC	1670.4	1	007440-38-2
2	LEAD	1529.2	2	007439-92-1
3	MERCURY	1458.6	3	007439-97-6
51	COBALT	1011.7	52	007440-48-4
57	NICKEL	996.2	57	007440-02-0
75	ZINC	915.5	75	007440-66-6
78	CHROMIUM	896.4	78	007440-47-3
118	COPPER	806.9	125	007440-50-8
139	MANGANESE	798.8	140	007439-96-5
171	PALLADIUM	705.3	171	007440-05-3
219	SILVER	605.4	217	007440-22-4

A) Toxicity of dental metals
B) Immunological response to dental metals
C) "Galvanism"/Electrosensitivity/Electro Smog

Reference: 1) Research based results of Prof. Reppel, Oehmichen, Klötzer und Geis - Gerstorfer. 2) **Muris et al.,** Micro analysis of metals in dental restorations as part of a diagnostic approach in metal allergies, Neuro Endocrinol Lett 2006; 27(Suppl 1): 49-52, 3) **Stejskal et al.,** Increased frequency of delayed type hypersensitivity to metals in patients with connective tissue disease, Journal of Trace Elements in Medicine and Biology, 2015 Jan

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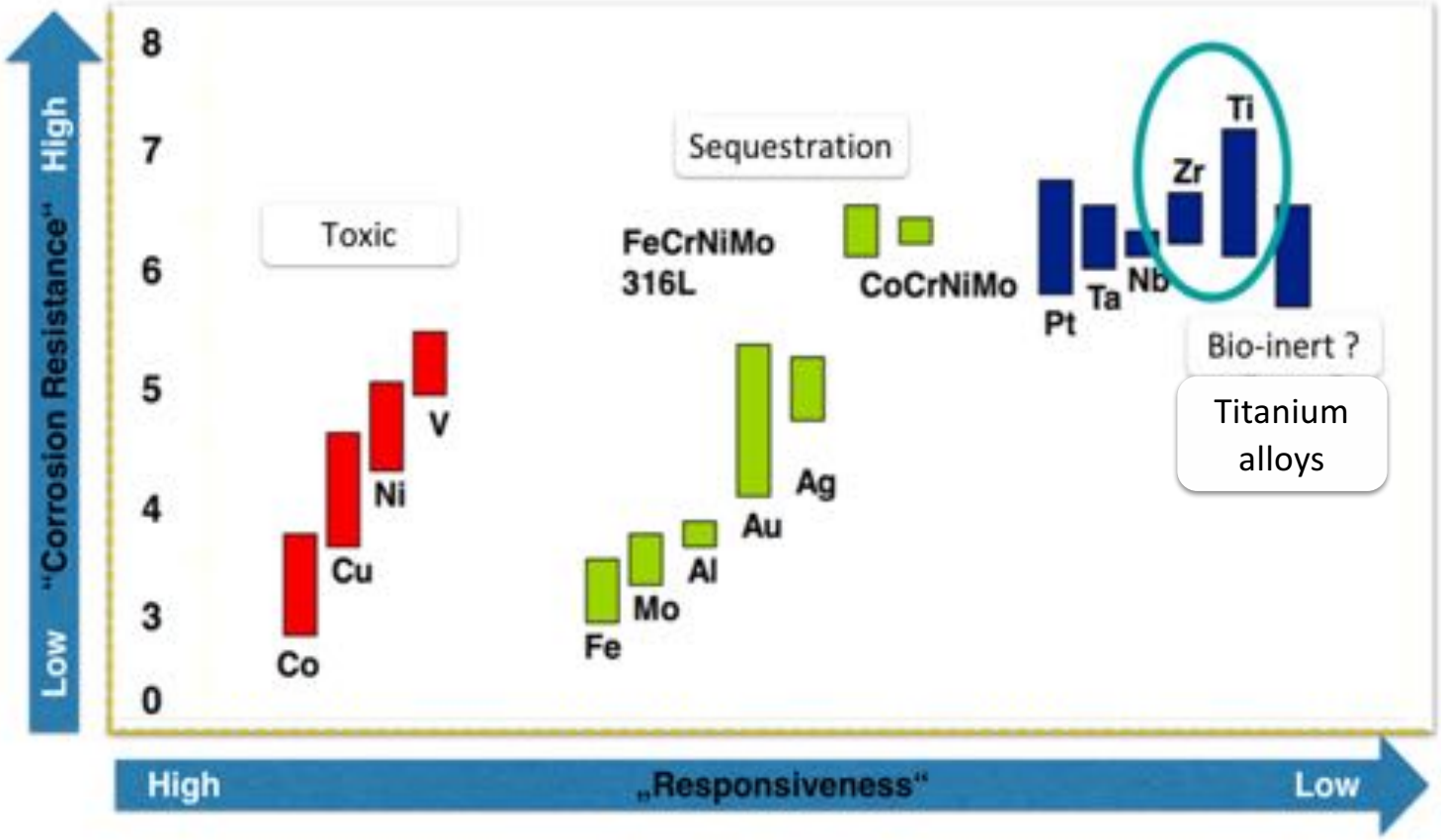
Corrosion Tendency of Dental Metals



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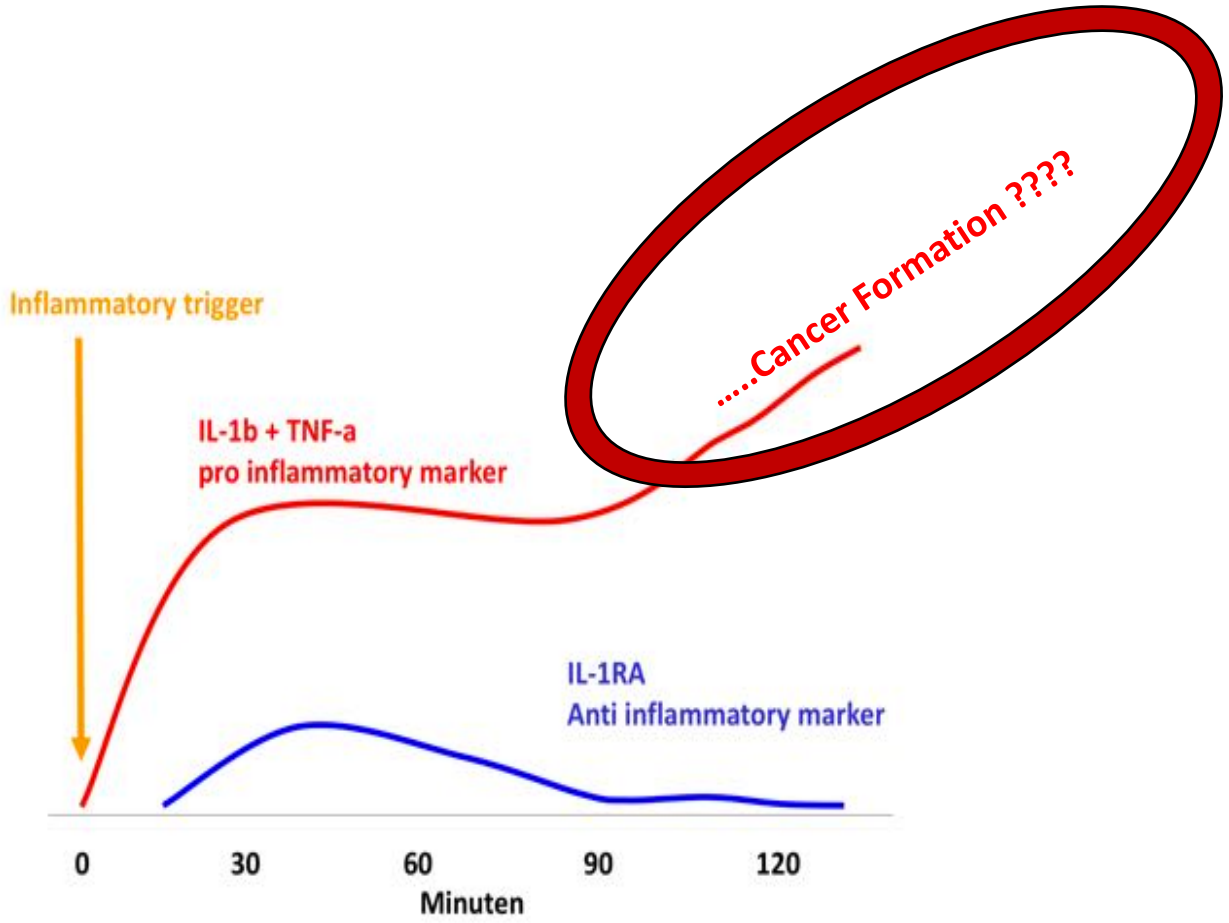

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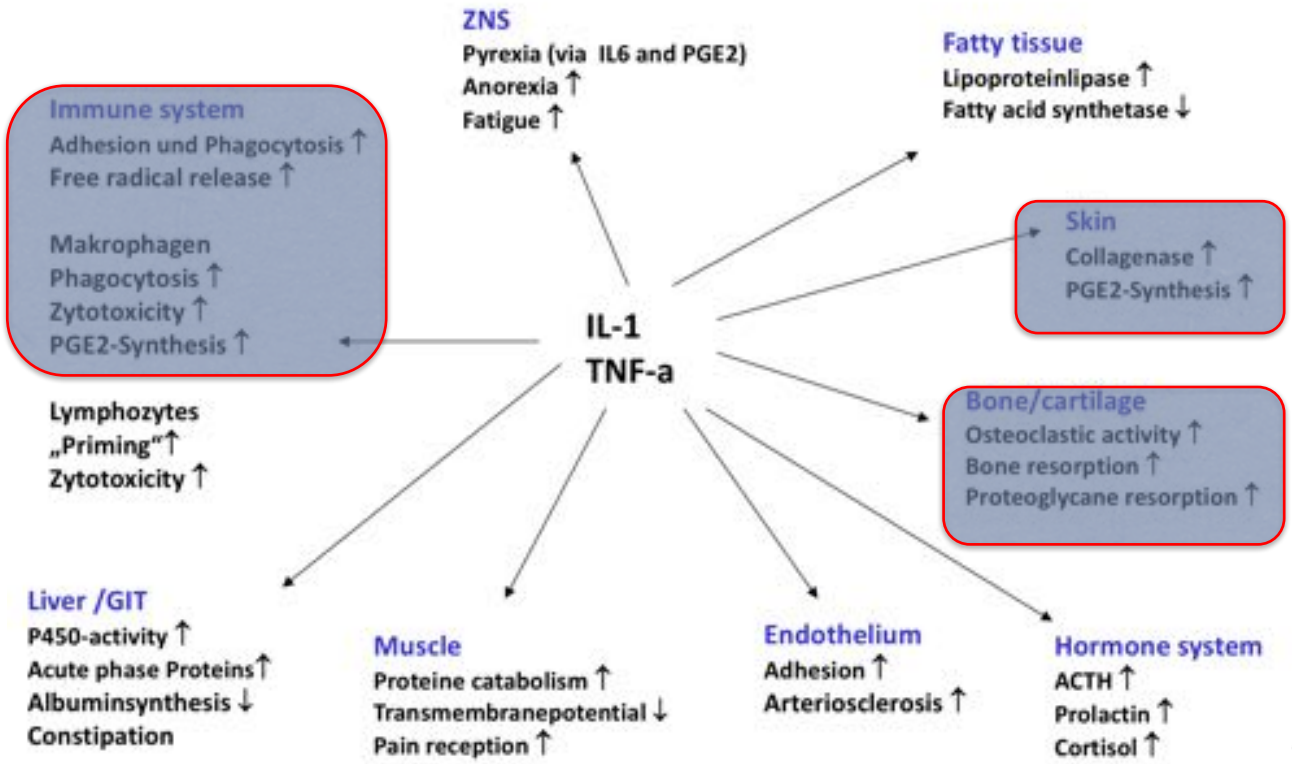
Local and systemic symptoms linked to immune mechanisms



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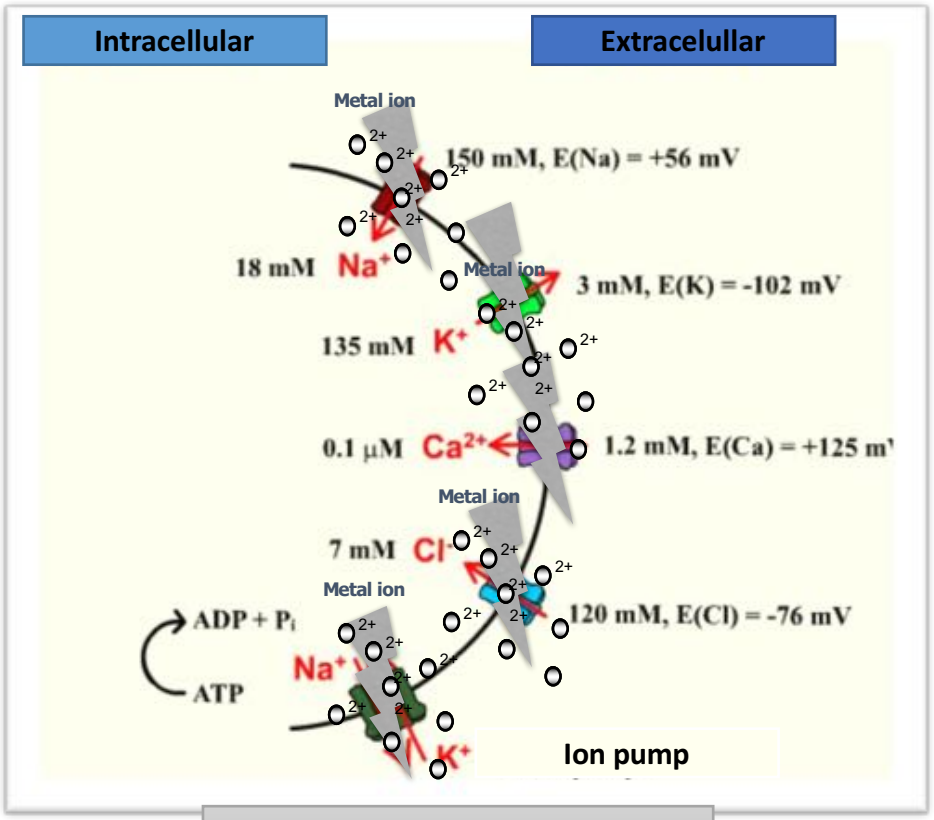
.....leads to cell membrane changes due to ionic discharge



Interruption of regular cell membrane voltage !!!!!!

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Diseases associated with metal overload……

Fibromyalgia (26)
Lymes Disease/Borrreliosis (27)
Breast cancer (28)
Autoimmune disorders (29)
Infertility (30)
Muscle pain (31)
CFS (32)

Reference: 26) **Stejskal et al.,** Metal-induced inflammation triggers fibromyalgia in metal-allergic patients. Neuroendocrinol Lett 2013; 34(6):559–565. 27) **Valentine-Thorn E et al.,** A novel lymphocyte transformation test (LTT-MELISA) for Lyme borreliosis Diagn Microbiol Infect Dis. 2006 Jul 27. 28) **Stejskal et al.,** Increased levels of transition metals in breast cancer tissue. Neuro Endocrinol Lett 2006; 27(Suppl 1): 36-39. 29) **Sterzl I et al.,** Removal of dental amalgam decreases anti-TPO and anti-Tg autoantibodies in patients with autoimmune thyroiditis. Neuro Endocrinol Lett 2006; 27(Suppl 1): 25-30. 30)**Podzimek S et al.,**Sensitization to inorganic mercury could be a risk factor for infertility. Neuroendocrinology Letters, 2005:26(4);277-282 31+32) **Regland B et al.,** Nickel allergy is found in a majority of women with chronic fatigue syndrome and muscle pain – and may be triggered by cigarette smoke and dietary nickel intake. Journal of Chronic Fatigue Syndrome, Vol. 8(1) 2001

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- Not to forget..... !
- Composite filling materials
  - contains organic matrix
  - contains inorganic fillers
  - contains coupling agent for bonding

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Consequences (1-7)

Locally: Cytotoxicity & Cell Death

→ **On Dentin proliferation & growth**

→ **Dental pulp cells**

Systemically: Allergic Reactions

→ **Rash**

→ **Contact dermatitis**

→ **Oestrogenic, mutagenic & cancerogenic effects**

1. Öncel Torun Z, Torun D, Baykal B, Öztuna A, Yeşildal F, Avcu F. Effects oftriethylene glycol dimethacrylate (TEGDMA) on the odontoclastic differentiationability of human dental pulp cells. J Appl Oral Sci. 2017 Nov-Dec;25(6):631-640. PubMed PMID: 29211284; PubMed Central PMCID:PMC5701533.2: Chang HH, Chang MC, Huang GF, Wang YL, Chan CP, Wang TM, Lin PS, Jeng JH.Effect of triethylene glycol dimethacrylate on the cytotoxicity, cyclooxygenase-2expression and prostanoids production in human dental pulp cells. Int Endod J.2012 Sep;45(9):848-58. PMID: 22486746.3: Yeh CC, Chang JZ, Yang WH, Chang HH, Lai EH, Kuo MY. NADPH oxidase 4 isinvolved in the triethylene glycol dimethacrylate-induced reactive oxygen speciesand apoptosis in human embryonic palatal mesenchymal and dental pulp cells. Clin Oral Investig. 2015 Jul;19(6):1463-71. PubMed PMID: 25467236. 4: Kwon JH, Park HC, Zhu T, Yang HC. Inhibition of odontogenic differentiation ofhuman dental pulp cells by dental resin monomers. Biomater Res. 2015 Apr 10;PubMed PMID: 26331079; PubMedCentral PMCID: PMC4552402. 5: Salehi S, Gwinner F, Mitchell JC, Pfeifer C, Ferracane JL. Cytotoxicity ofresin composites containing bioactive glass fillers. Dent Mater. 2015Feb;31(2):195-203. PubMedPMID: 25564110; PubMed Central PMCID: PMC4448918. 6: Lyapina M, Dencheva M, Krasteva A, Tzekova M, Kisselova-Yaneva A. Concomitant contact allergy to formaldehyde and methacrylic monomers in students of dentalmedicine and dental patients. Int J Occup Med Environ Health. 2014Oct;27(5):797-807PubMed PMID:25323987. 7: Ratanasathien S, Wataha JC, Hanks CT, Dennison JB. Cytotoxic interactiveeffects of dentin bonding components on mouse fibroblasts. J Dent Res. 1995Sep;74(9):1602-6. PubMed PMID: 7560423.

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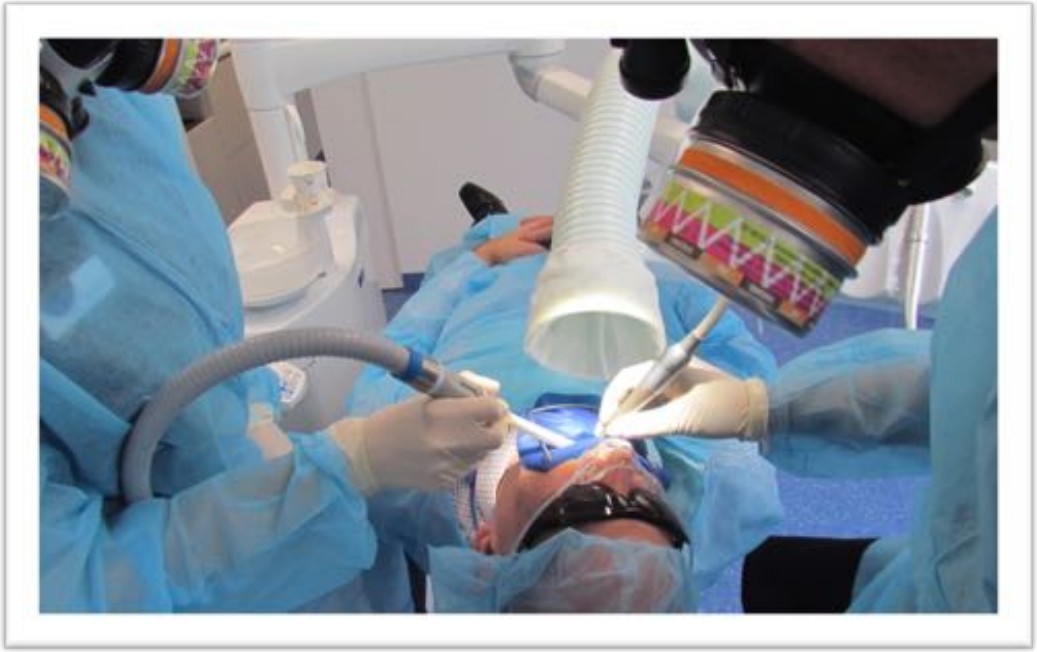
Amalgam



Source:http://dentalpod.com.au/wp-content/uploads/2016/01/ARP-11-copy.jpg

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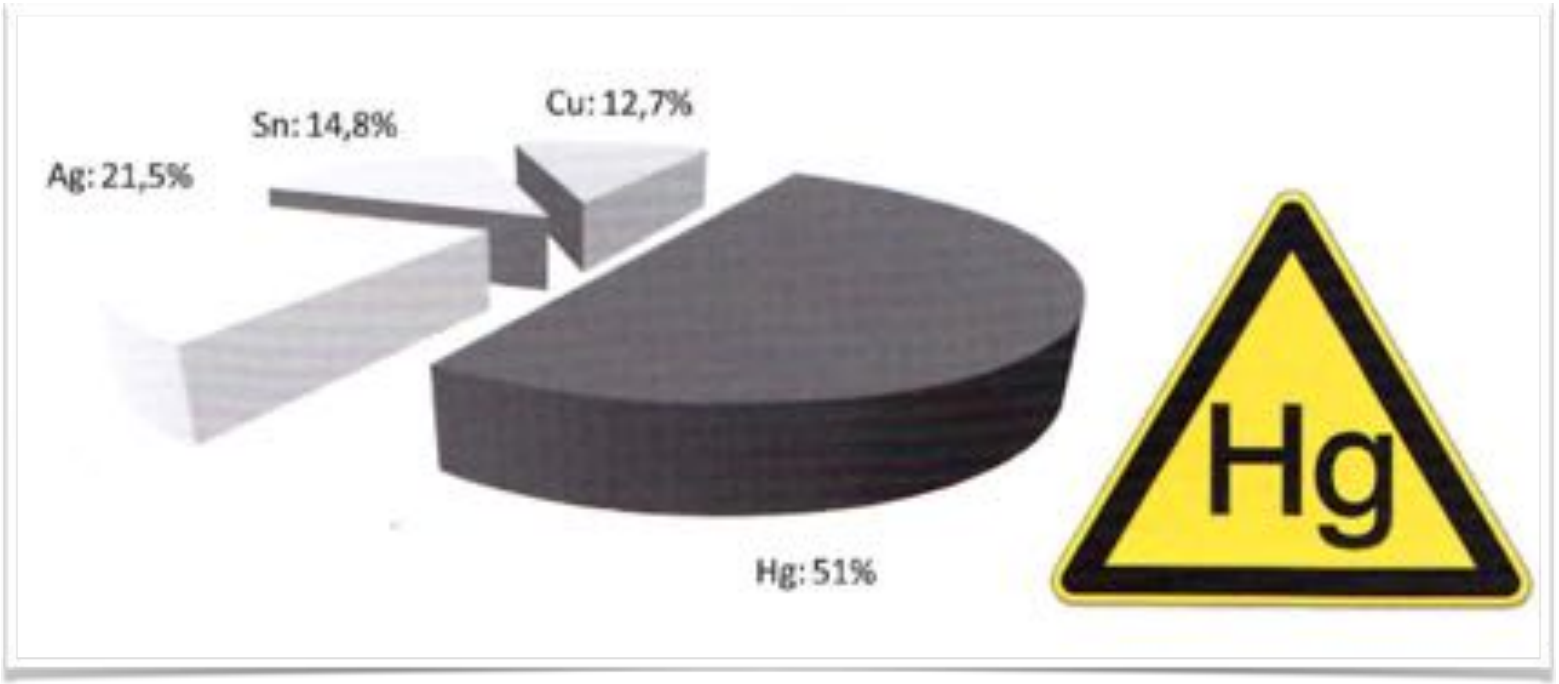

Amalgam

- Ag, Sn,Cu —> health effects due to metals
- **Hg (Mercury) —> health effects due to mercury**

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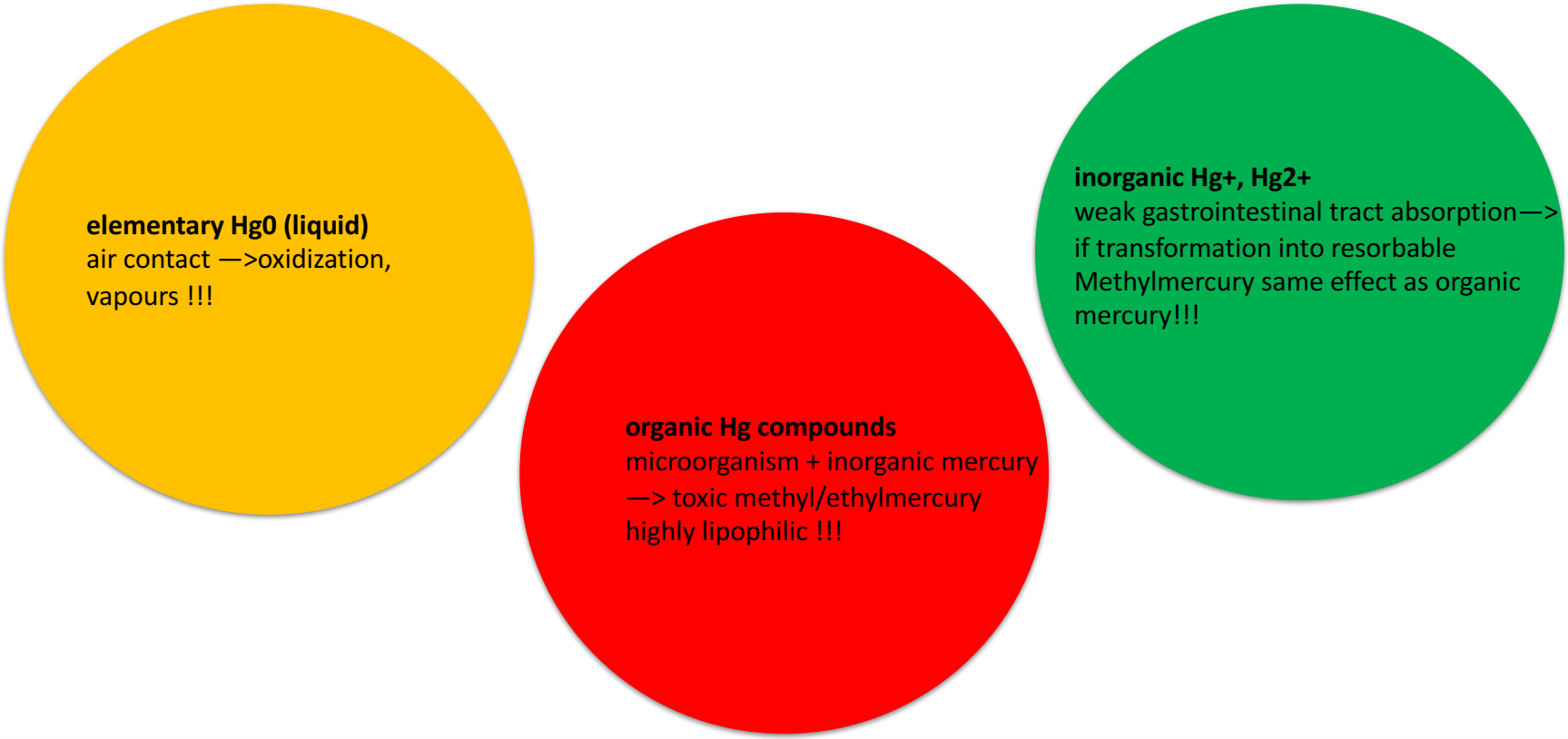
3 elemental forms of mercury



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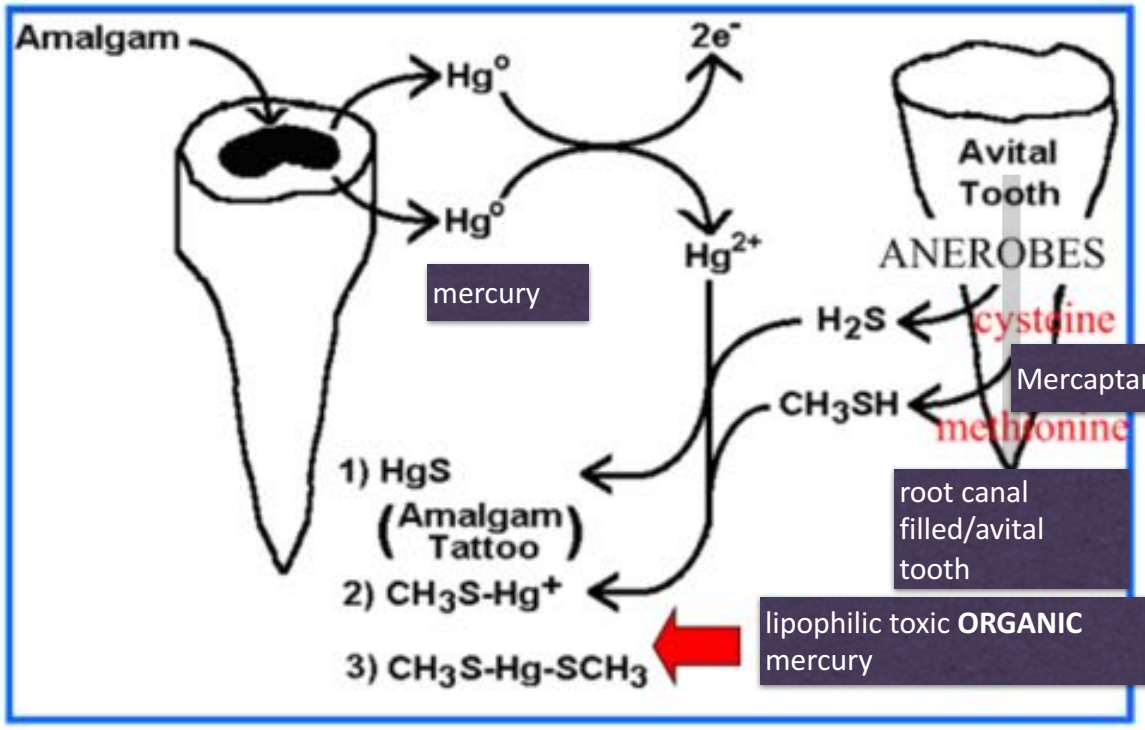
Amalgam Mercury Can Combine With Bacterial Toxins To Produce Even More Toxic Species



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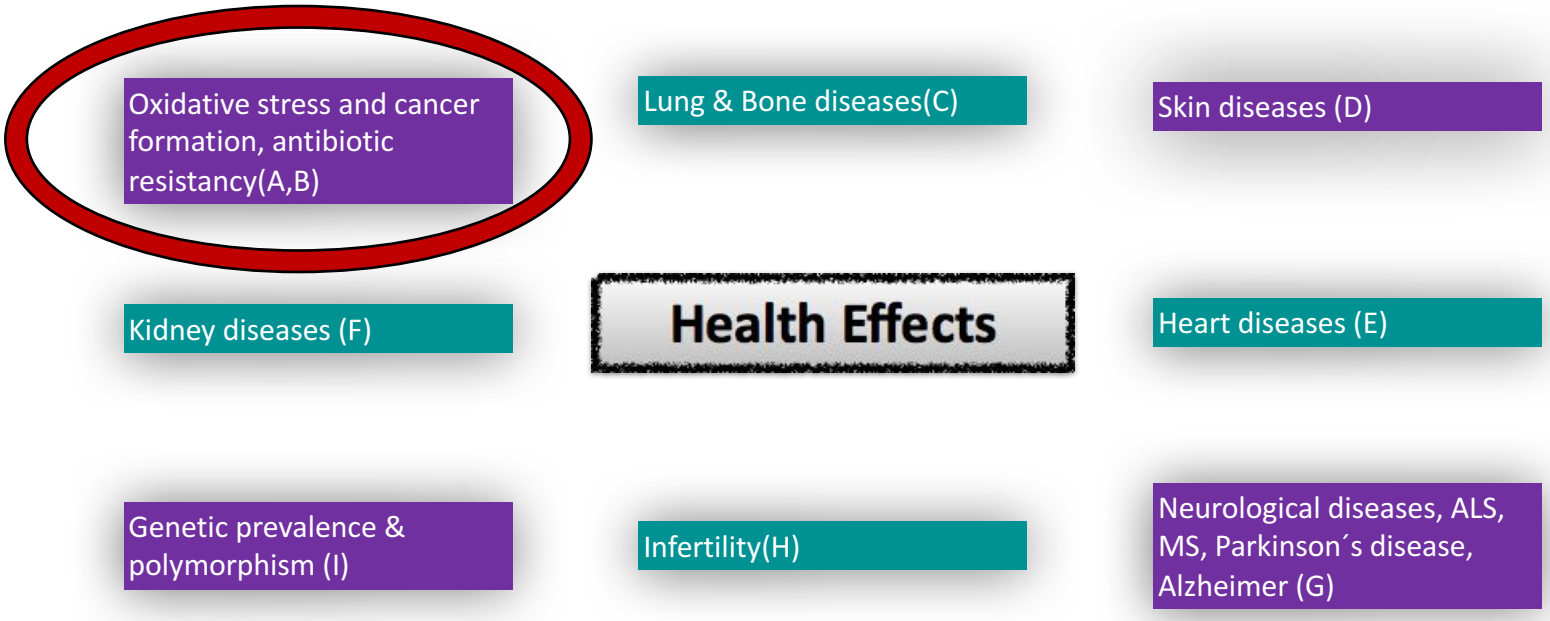

Reference: A)**Di Pietro A et al.,** Biomonitoring of DNA damage in peripheral blood lymphocytes of subjects with dental restorative fillings. Mutat Res 2008, 650:115-122. B)**Lorscheider FL et al.,** The dental amalgam mercury controversy–inorganic mercury and the CNS; genetic linkage of mercury and antibiotic resistances in intestinal bacteria. Toxicology 1995, 97:19-22. C)**Hahn LJ et al.,** Whole-body imaging of the distribution of mercury released from dental fillings into monkey tissues. FASEB Journal 1990, 4:3256-3260. D) **Weidinger S et al.,** Body burden of mercury is associated with acute atopic eczema and total IgE in children from southern Germany. J Allergy Clin Immunol 2004, 114:457-459. E) **Houston MC:** The role of mercury and cadmium heavy metals in vascular disease, hypertension, coronary heart disease, and myocardial infarction. Altern Ther Health Med 2007, 13:128-133,.F)**Mortada WI et al.,**Mercury in dental restoration: is there a risk of nephrotoxicity? J Nephrol 2002, 15:171-176. G) **Carpenter DO:** Effects of metals on the nervous system of humans and animals. Int J Occup Med Environ Health 2001, 14:209-218. H)**Gerhard I et al.,** Heavy metals and fertility. J Toxicol Environ Health. 1998, 54:593-611. I) **Wojcik DP et al.,** Mercury toxicity presenting as chronic fatigue, memory impairment and depression: diagnosis, treatment, susceptibility, and outcomes in a New Zealand general practice setting (1994-2006). Neuro Endocrinol Lett 2006, 27:415-423.

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Systemic Detoxification

Source: http://www.well-beingsecrets.com/wp-content/uploads/time-to-detox.jpg:

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Oral Detox Plan

Phase 1

Prior to amalgam removal:

- Vitamin C 2 g per day
- Na-Selenium 2tbls. in the evening (apart from Vit. C)
- Zinc 2 tbls. in the evening (2-3 weeks, afterwards 1-2 weeks break and then restart)
- Bio-Chlorella , 3 x 4-6 tbls. per day
- Solidago, Taraxacum Ceres 3x5 drops (support kidney,liver)
- Alkalic Powder or ALKALA (Sanum), 1 tea spoon od

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Oral Detox Plan

Phase 2

During amalgam/metal removal:

- Vitamin C 2g per day
- Na-Selenium, 1x ampule per day (evening)
- Bio-Chlorella , 3 x 4-6 tbls. per day
- Alpstein Clinic Detox Infusion
- Antioxidative Supplements: Microcare Dental Vital, 2 tbls. per day
- Alkalic Powder/ Alkala, 1 tea spoon bd
- may be: (Lung complaints) NAC (Fluimicil 200mg, 3 x 1tbl. per day)
- Hydration (2-3 liter water)

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Oral Detox Plan

Phase 3

After amlagam/metal removal until values (DMPS-Test) have normalized:

- Individual adjustment, depending on body constitution and medical problems, long lasting 6 months -2 years
- Continue Plan Phase 1 (Vitamin C, Selenium, Zinc ans so on)
- Coenzym Q10 (Improve cell activity/ redox potential), 1-2 tee spoon size, od, morning
- Coriandrum Ceres (increase dosage 3x1 drops → max. 3x5 drops)
- Bio-Chlorella 10-20 tblts. per day

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Detox of metals

Mikronährstoff	Al	As	Cd	Pb	Hg	Ag	Ni	Sn	Au	Cu	Pd	Pt	Co	Ga	In	Tl	Mn
Natrium													●				
Kalium																A	
Calcium	●	●	●	●													●
Magnesium	●																
Phosphor																	●
Zink	●	●	●	●	●	●	●	●	●	A	●	●		●	●	●	
Mangan										●		●					
Eisen				●						A							●
Selen		●			●			●	●		●	●		●	●	●	
Jod		●															
Kupfer						●						●					●
Fluor	A																
Germanium			●	●	●							●					
Vit A									●								
Vit B Complex					●			●	●		●						
Vit B1 Thiamin													●				
Vit B6	●	●		●		●				●							
Vit C		●	●	●	●	●	●	●	●	●	●	●		●	●	●	
Vit D																	
Vit E		●	●	●	●	●	●	●	●	●	●	●		●	●	●	
Vit K																	
Biotin																	
Folsäure																	
Co-Enzym Q10												●					
Methionin		●	●	●	●	●	●	●	●	●	●	●		●	●		
Cystein		●	●	●	●	●	●	●		●	●	●		●	●		
Liponsäure		●	●	●	●		●	●		●							
Glutathion					●						●	●	●	●	●	●	
Lysin				●	●						●	●		●	●		
Taurin						●			●								

A = Antagonisten
TOXIBA, Juli 2006

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Heavy metals – additional chelating agents

- **DMPS : Dimaval®:** 250mg-ampulles Heel , one amp per week i.m./ i.v.

- **CAVE !! Allergies**

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Alpstein Clinic Detox Infusion

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Homeopathic add on.....

- **Traumeel** HEEL
- **Ubichinon** HEEL
- **Hypophysis suis** inj. HEEL
- **Zinkokehl** HEEL
- **Solidago** HEEL
- **Myositis** HEEL
- **Taraxacum & Hepar comp.** HEEL
- **Glandula thyroidea & suprarenalis** HEEL

1: González de Vega C, Speed C, Wolfarth B, González J. Traumeel vs. diclofenacfor reducing pain and improving ankle mobility after acute ankle sprain: amulticentre, randomised, blinded, controlled and non-inferiority trial. Int JClin Pract. 2013 Oct;67(10):979-89. PMCID: PMC4231442. 2: Toliopoulos IK, Simos Y, Bougiouklis D, Oikonomidis S. Stimulation of natural killer cells by homoeopathic complexes: an in vitro and in vivo pilot study inadvanced cancer patients. Cell Biochem Funct. 2013 Dec;31(8):713-8. doi:10.1002/cbf.2960. Epub 2013 Feb 13. PubMed PMID: 23408699. 3. Planková A, Mikus P, Havránek E. Determination of selenium in clinical plasma samples related to atopic dermatitis study by chronopotentiometric strippingmethod. Pharmazie. 2010 May;65(5):327-30. PubMed PMID: 20503922. 4. Melzig MF. [Goldenrod--a classical exponent in the urological phytotherapy].Wien Med Wochenschr. 2004 Nov;154(21-22):523-7. German. PubMed PMID: 15638071. 5. Gulfraz M, Ahamd D, Ahmad MS, Qureshi R, Mahmood RT, Jabeen N, Abbasi KS.Effect of leaf extracts of Taraxacum officinale on CCl4 induced hepatotoxicity inrats, in vivo study. Pak J Pharm Sci. 2014 Jul;27(4):825-9. PubMed PMID:25015447. 6. Thent ZC, Das S. Involvement of liver in diabetes mellitus: herbal remedies.Clin Ter. 2014;165(4):223-30. doi: 10.7417/CT.2014.1738. Review. PubMed PMID:25203338. 7. Rutten L, Mathie RT, Fisher P, Goossens M, van Wassenhoven M. Plausibility andevidence: the case of homeopathy. Med Health Care Philos. 2013 Aug;16(3):525-32. doi: 10.1007/s11019-012-9413-9. PubMed PMID: 22539134.

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Injectables from **HEVERT (homeopathy)**

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Name	Indication
Hevert® **Arnica** Rx	Muscle pain, stiffness, bruising, swelling due to injuries and overexertion, scar treatment
Hevert® Calmvalera™ comp. Rx	Restlessness, sleep disorders, mild depressive states, mental exhaustion
Hevert® **Gelsemium** comp. Rx	Improvement of painful nerve conditions, such as postherpetic neuralgia, trigeminal neuralgia or sciatic nerve pain
Hevert® **Hepar** comp. Rx	Improvement of liver and bilary system disorders
Lymphaden™ comp. Rx	Improvement of conditions such as swelling of lymph nodes, lymphatic edema, post-inflammatory situations

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SEE
www.hervertusa.com
info@hevertusa.com

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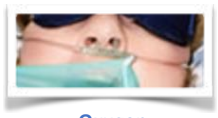
! Interdisciplinary work between dentist and doctor !

3 Principles of safe metal & amalgam removal

- Protection of patient and dentist
- Removal of amalgam/mercury under safety procedures
- Systemic Detoxification (oral/iv./im.)


Rubberdam & clean up suctioner


Oxygen


Na -Selenium

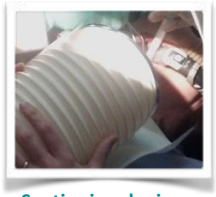

Solidago


Na - Thiosulfate


Cilantro


Pear shaped rough diamond, water, low rpm (15-20)


Protective gear


Suctioning device


„Metall Free“ - Ceramics


Detox and/or Build Up Infusions with Vitamins, Minerals and antioxidants, chelating agents for any dental intervention


Chlorella


DMPS - Chelation Therapy

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Oral inflammatory diseases and causes of systemic diseases

Surgical !

1. Periodontitis
2. Jaw Cavitations
3. Root Canal Treatment/Endodontics

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Surgical =

- consider careful timing and approach for dental surgical intervention
  - step wise minimal invasive approach vs. all in one concepts ?

……..how is the general health of patients
diagnosed with cancer ?

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Prerequirement for surgical procedures in cancer patient

• check blood values (e.g. leucozytes, granulocytes,haemoglobin, thrombocytes, pro-inflammatory cytokines, coagulation factors)

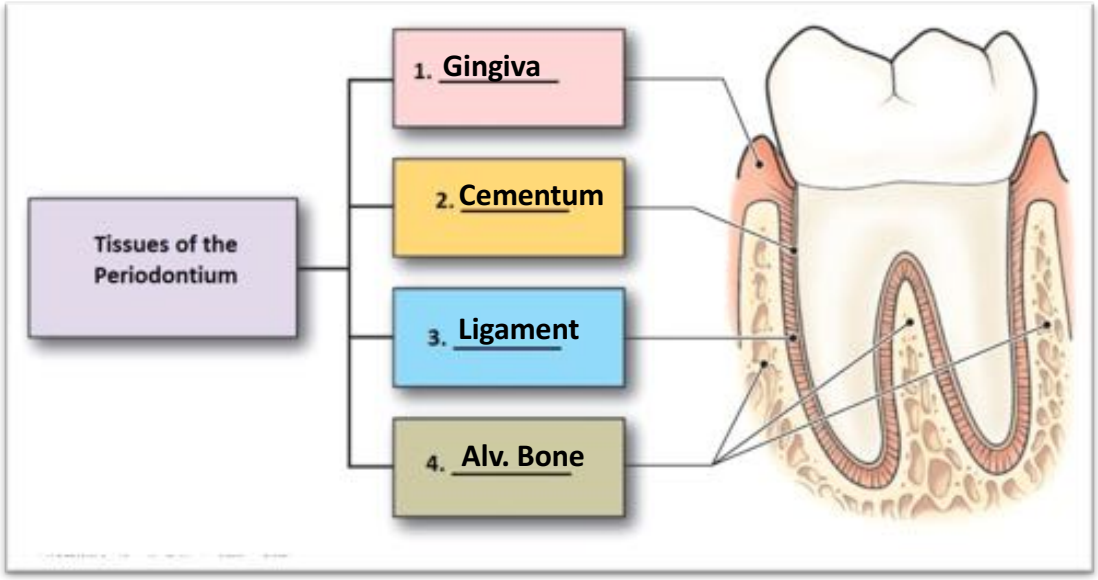
• Bone profile (Ca/Phosphate, Vitamin D levels)

• inpatient department/day clinic with possible daily wound control appointments (ideally 1 day pre op. up to 5 day post op.) → accompanying daily biological therapies (e.g. neuraltherapy, iv infusions….)

• in case of doubt: Antibiotics/Steroids → Meaningfulness ????

1. Periodontitis

is caused by bacterial overload, presenting itself by irreversible destruction of the periodontium (soft and hard tissue).



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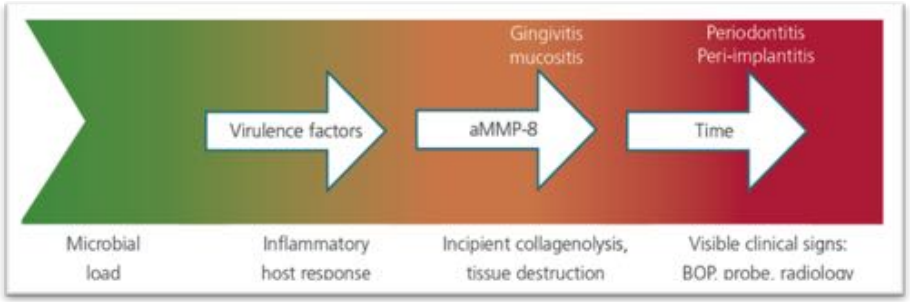
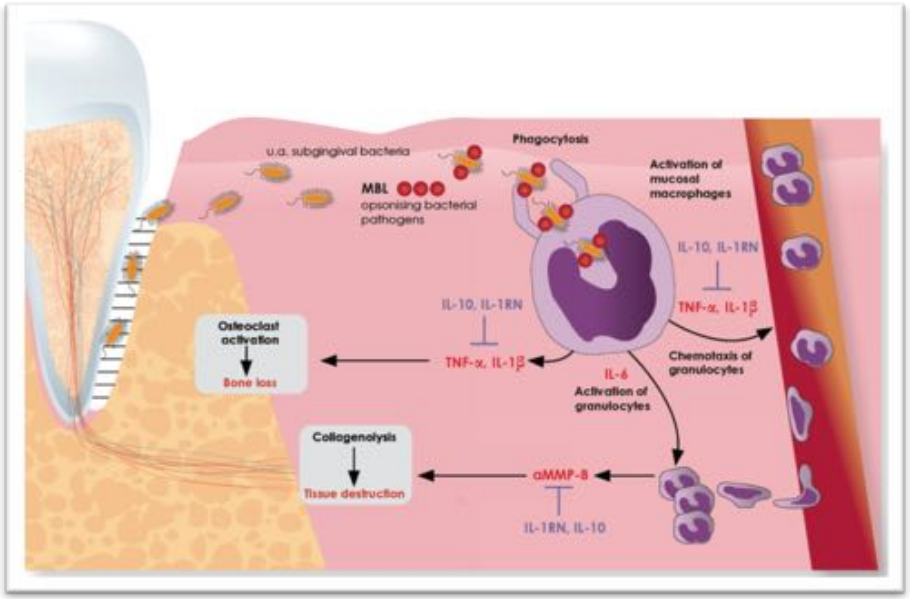
Periodontitis





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Swiss Excellence Health Center
Integrative Biological Medicine and Dentistry

Why is it necessary ?

mSphere. 2016 May 11;1(3). pii: e00102-16. doi: 10.1128/mSphere.00102-16.

Metabolic and Community Synergy of Oral Bacteria in Colorectal Cancer.

Flynn KJ[1], Baxter NT[1], Schloss PD[1].

Int J Clin Exp Pathol. 2015 Sep 1;8(9):11835-6. eCollection 2015.

Oral bacteria in pancreatic cancer: mutagenesis of the p53 tumour suppressor gene.

Öğrendik M[1].

PLoS One. 2013;8(1):e51604. doi: 10.1371/journal.pone.0051604. Epub 2013 Jan 7.

Association between selected oral pathogens and gastric precancerous lesions.

Salazar CR[1], Sun J, Li Y, Francois F, Corby P, Perez-Perez G, Dasanayake A, Pei Z, Chen Y.

J Dent Res. 2013 Jun;92(6):485-91. doi: 10.1177/0022034513487559. Epub 2013 Apr 26.

Mobile microbiome: oral bacteria in extra-oral infections and inflammation.

Han YW[1], Wang X.

Tumour Biol. 2016 Aug 1. [Epub ahead of print]

Oral pathogens change proliferation properties of oral tumor cells by affecting gene expression of human defensins.

Hoppe T[1], Kraus D[2], Novak N[3], Probstmeier R[4], Frentzen M[1], Wenghoefer M[5], Jepsen S[1], Winter J[6].

Conclusion: Oral bacterias are linked to cancer formation !!!!

“ Bactericidial ”

Antemonit/Rosae atheroleum comp.
(intra und post op.)

1. Antimonit
2. Quarz
3. Atropa Belladona
4. Argent. nitric D 19
5. Echinacea
6. Ol Rosae

CMP Tincture
(intra op.)

1.Camphora
2.Cera flava
3.Hypericum
4.Propolis
5.Ol. Aethereum Caryophylli

2. Root Canal Treatment

Weston-Price Research

Dr. Weston Price

described finding bacterial growth in root canals that could be transferred from humans into animals and *create the same diseases of the donor human in from 80 to 100% of the animals*.

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Interne Analyse - WKB Zähne

Zeitraum: Januar 2016 - Dezember 2016

Untersuchung von 623 Patienten auf: akute Schmerzen, insuff. Würzelfüllung, Überstopfung, apikale Beherdung, Fistelbildung

WKB Zähne 1417	Komplikationen
akute Schmerzen/Abszess	4,6 % (66)
insuff. Wurzelfüllung, Überstopfung	36,6% (520)
apikale Beherdung (OPG/DVT)	19,4 % (275)
Fistelbildung (chronisch)	2 % (29)
Gesamtbeschwerden	**62,6 %**

Oral microorganism/pathogens cause disseminated systemic diseases (38-40)

Increase in failure rate of endodontic treatments (CAP up to 60%) even with better technical equipment (41-43)

All improvements and innovations in the field of endodontics ***have not lead to an improvement*** in the success rates (44)

Presence : ***No changes*** in the situation, ***stagnation*** (45)

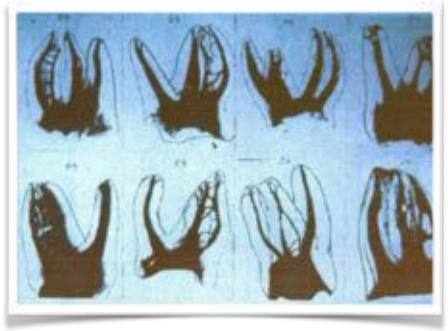
Future: ***Stem cell therapy ????***

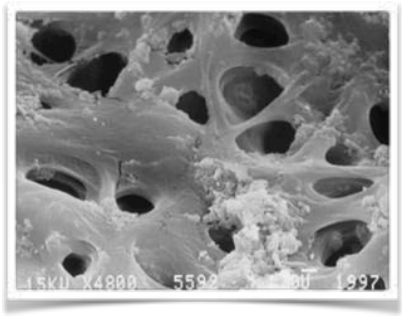
Reference: 38) **Debelian et al.,** Systemic diseases caused by oral microorganisms. 1994 Endod. Dent. Traumatol. 10:57-65. 39) **Xiaojing Li et al.,** Systemic Diseases Caused by Oral Infection Department of Oral Biology1 and Department of Endodontics,2 Faculty of Dentistry, University of Oslo, Oslo, Norway. 40) **Debelian et al.,** Anaerobic bacteremia and fungemia in patients undergoing endodontic therapy: an overview. 1998 Ann. Periodontol. 3:281-287. 41) **Eckerbom, M. et al.:** A 20-year follow-up study of endodontic variables and apicalstatusinaSwedishpopulation.IntEndodJ 40,940(2007). 42)**Koch M et al.,** On implementation of an endodontic program.SwedDentJ Suppl 230, 9 (2013). 43) **Weiger R et al.,** Periapical status, quality of root canal fillings and ... Endodont Dent Traumatol 13:69 (1997). 44) **Kirkevang L et al.,** Frequency and distribution of endodontycally treated teeth and apical periodontitis ... IntEndodontJ 34:198(2001). 45) **Van der Sluis L et al.,** Past and future of endodontics. ENDO (Lond Engl) 6 (2012).

Pathogenesis (46)

Even when the highest standards and the most careful procedures are followed, failures still occur. This is because there are root canal regions that cannot be cleaned and obturated with existing equipments, materials, and techniques, and thus, infection can persist. In very rare cases, there are also factors located within the inflamed periapical tissue that can interfere with post-treatment healing of the lesion. The data on the biological causes

Root canal or canal system ?

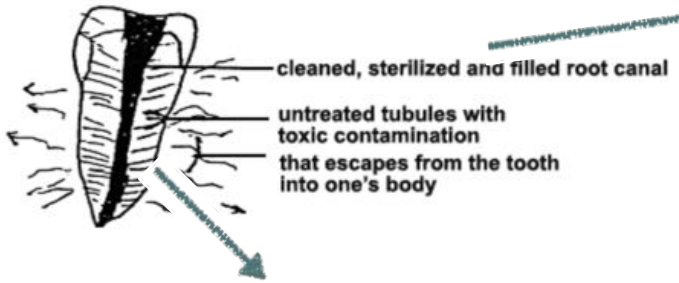




Leading to…… ?

Reference: 46) **Nair PN et al.,** Pathogenesis of apical periodontitis and the causes of endodontic failures. Crit Rev Oral Biol Med. 2004 Nov 1;15(6):348-81.

Limitations



no blood supply, no lymphatics, no nerve tissue - no immune system (loss of odontoblast function —> unprotected tubuli) (48,49)

..... anatomical, immunological and mechanical **limitations** (47)

great habitat for anaerobic bacteria (50,51) producing

Toxins

Reference: 47) **Barone C et. al.,** Treatment outcome in endodontics: the Toronto study--phases 3, 4, and 5: apical surgery. J Endod. 2010 Jan;36(1):28-35. 48) **Gomes, M. et al.,** Can Apical Periodontitis Modify Systemic Levels of Inflammatory Markers? A Systematic ReviewandMetaanalysis.J Endod39,1205(2013). 49) **Wu, M. et al.,** Consequences of and strategies to deal with residual post-treatment root canal infection. International Endodontic J ournal (2006). 50) **Richardson N et al.,** Microflora in teeth associated with apical periodontitis: a methodological observational study comparing two protocols and three microscopy techniques. International Endodontic Journal 2009 October; Vol. 42(10): 908-21 51) **J.F. Siqueira, et. al.,** Bacteria in the apical root canal of teeth with primary apical periodontitis. Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology and Endodontology May 2009; Vol. 107 (5): 721-726

Toxins

Bacterias produce toxic metabolites —> carcinogenic hydrogen sulfur compounds (**Thioether/Mercaptane → IL-10, INF γ**) (52)

Toxins cause local and systemic diseases by triggering an **immune response** (53)

Immune Response

Local: adjacent to teeth structures causing **cystic lesions**, **abscesses** and **jaw cavitations** (54-56)

Systemic: Increase in inflammatory markers/cytokines **(TNF α, IL 1ß, RANTES)** circulate through the blood system —> **chronic inflammation** (low pH reduced oxygen saturation/oxidative stress), **Cell Proliferation** (57-62)

Reference 52) **Persson S et al.,**The Formation of hydrogen sulfide and methyl mercaptan by oral bacteria. Oral Microbiology and Immunology 1990 August; Vol. 5 (4): 195-201 53) **Lechner J et al.**, Mehrdimensionale Systemdiagnose des wurzelgefüllten Zahnes. ZWR-Das Deutsche Zahnärzteblatt 2012; Vol. 121(12): 640-644 54) **Sousa EL et. al.,**Macrophage Cell Activation with Acute Apical Abscess Contents Determined by Interleukin-1 Beta and Tumor Necrosis Factor Alpha Production. J Endod. 2014 Sep 6. 55) **Martinho FC et. al.,** Signaling pathways activation by primary endodontic infectious contents and production of inflammatory mediators. J Endod. 2014 Apr;40(4):484-9. 56) **Marciel KF et. al.**,Cytokine expression in response to root canal infection in gnotobiotic mice. Int Endod J. 2012 Apr;45(4):354-62. 57) **Hernadi K et. al.,** Elevated tumor necrosis factor-alpha expression in periapical lesions infected by Epstein-Barr virus. J Endod. 2013 Apr;39(4):456-60. 58) **Marton IJ et. al.**,Differential in situ distribution of interleukin-8, monocyte chemoattractant protein-1 and Rantes in human chronic periapical granuloma. Oral Microbiol Immunol. 2000 Feb;15(1):63-5. 59) **Martinho FC et. al.,** Antigenic activity of bacterial endodontic contents from primary root canal infection with periapical lesions against macrophage in the release of interleukin-1beta and tumor necrosis factor alpha. J Endod. 2010 Sep;36(9):1467-74. 60) **De Brito LC et.al.**,Immunological profile of periapical endodontic infections from HIV- and HIV+ patients. Int Endod J. 2014 Jul 29. 61) **Lechner J et. al.,** RANTES and fibroblast growth factor 2 in jawbone cavitations: triggers for systemic disease Int J Gen Med. 2013 Apr 22;6:277-90. 62) **Tripi TR et. al.**,Proliferative activity in periapical lesions. Aust Endod J. 2003 Apr;29(1):31-3.

Cell Proliferation

inflammatory markers/cytokines (e.g. **TNF alpha, IL 1ß, RANTES**)

uncontrolled cell proliferation **–> Cancer formation ?**

Breast, Bladder, Prostate,Cervix (63-69)

Vital teeth (pulp!) are much more resistant to bacterial invasion than nonvital/ root canal treated teeth (70)

The vital pulp plays an important role in the prevention of bacterial invasion and therefore protection !

Reference: 63) **Lechner J et. al.**,Hyperactivated Signaling Pathways of Chemokine RANTES/CCL5 in Osteopathies of Jawbone in Breast Cancer Patients-Case Report and Research. Breast Cancer (Auckl). 2014 May 21;8:89-96. 64) **Karakaxas D et. al.**, Genetic polymorphisms of inflammatory response gene TNF-α and its influence on sporadic pancreatic neuroendocrine tumors predisposition risk. Med Oncol. 2014 Oct;31(10):241. 65) **Thompson DB et. al.**, Immunological basis in the pathogenesis and treatment of bladder cancer. Expert Rev Clin Immunol. 2014 Nov 13:1-15. 66) **Bigatto V et. al.**, TNF-α promotes invasive growth through the MET signaling pathway. Mol Oncol. 2014 Sep 26. pii: S1574-7891(14)00215-4. 67) **FU XT et. al.**,Macrophage-secreted IL-8 induces epithelial-mesenchymal transition in hepatocellular carcinoma cells by activating the JAK2/STAT3/Snail pathway. Int J Oncol. 2014 Nov 18. 68) **Singhal P et. al.**, Association of IL-10 GTC haplotype with serum level and HPV infection in the development of cervical carcinoma. Tumour Biol. 2014 Nov 21. 69) **Lei YM et. al.**, Interleukin-1β -mediated suppression of microRNA-101 and upregulation of enhancer of zeste homolog 2 is involved in particle-induced lung cancer. Med Oncol. 2015 Jan;32(1):387. 70) **Nagaoka S et al.,** Bacterial invasion into dentinal tubules of human vital and nonvital teeth. J Endod. 1995 Feb;21(2):70-3.

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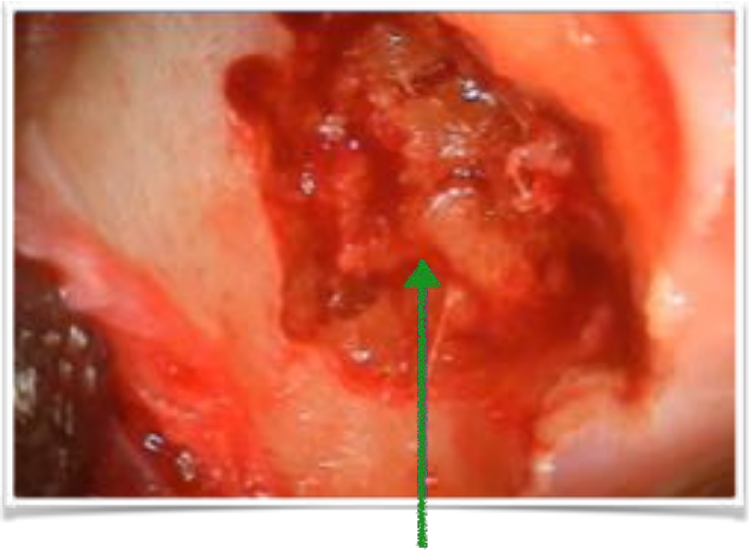
3. Jaw Cavitation (JC)
Neuralgia inducing cavitational osteonecrosis (NICO)



„ fatty degenerative osteonecrosis“
anaerobic bacterias
—> Toxins !

Symptoms

Locally: focal inflammation
—> painless (1)
—> toxin —> facial neuralgia/pain (2,3)
—> no swelling
—> no pus formation
—> ischaemic nonresorbing necrotic bone flakes with cavity formation(4)
—> *microscopic features:*
dense marrow fibrosis,
smudged tissue (5)

Systemically: Action at distance on other organs/organ systems

Reference: 1) **Bouquot JE et al.,** Ischemia and infarction of the jaws--the "phantom" pain of NICO. Cranio. 1994 Jul;12(3):138-9. + 2) Long-term effects of jawbone curettage on the pain of facial neuralgia. J Oral Maxillofac Surg. 1995 Apr;53(4):387-97; discussion 397-9 + 3) Neuropathic pain in maxillofacial osteonecrosis. J Oral Maxillofac Surg. 2000 Sep;58(9):1003-20.+ 4/5) Neuralgia-inducing cavitational osteonecrosis (NICO).Osteomyelitis in 224 jawbone samples from patients with facial neuralgia. Oral Surg Oral Med Oral Pathol. 1992 Mar;73(3):307-20

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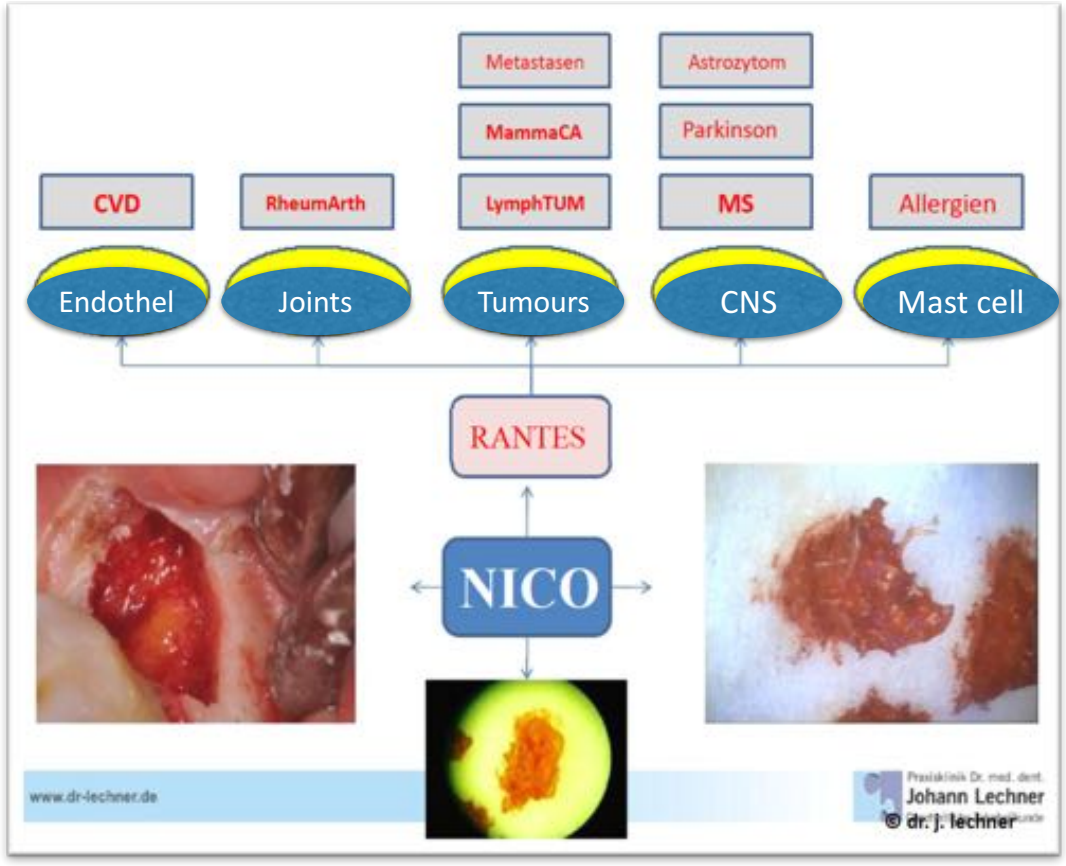
JC



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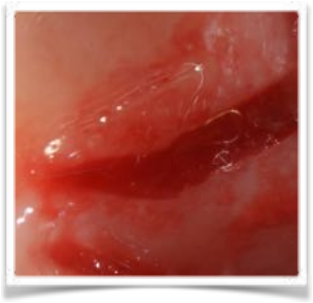
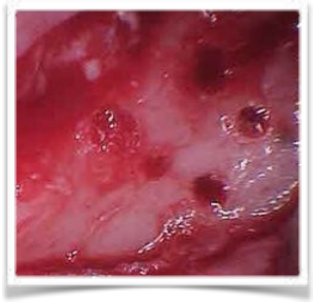
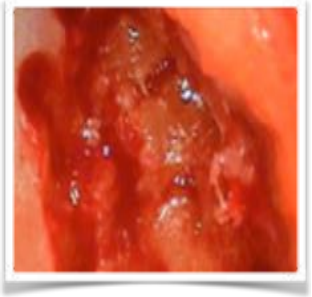
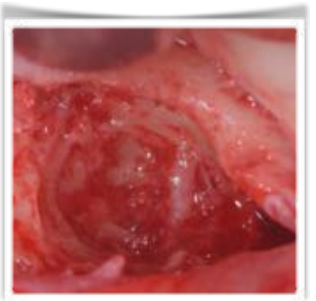
JC

Treatment by Incision & Curretage /Pieoztherapy (6)

„Fatty vacuoles & soft smudged necrotic tissue“

Chronic Ostitis

What next ?

—> **Ozontherapy** (7)

—> **PRGF Therapy** (8)

—> **PNSA Therapy** (9)

Reference: 6) **Bouquot JE et al.**, Long-term effects of jawbone curettage on the pain of facial neuralgia. J Oral Maxillofac Surg. 1995 Apr;53(4):387-97; discussion 397-9, 7)**Nogales CG et al.,** Ozone therapy in medicine and dentistry.J Contemp Dent Pract. 2008 May 1;9(4):75-84. 8) **Mozzati M et al.,** Failure risk estimates after dental implants placement associated with plasma rich in growth factor-Endoret in osteoporotic women under bisphosphonate therapy J Craniofac Surg. 2015 May;26(3):749-55. 9) **Egli S et al.,** Long-term results of therapeutic local anesthesia (neural therapy) in 280 referred refractory chronic pain patients. BMC Complement Altern Med. 2015 Jun 27;15:200.

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Biological Treatment Approaches (BTA)

”Alpstein Clinic”

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Biological Treatment Approaches

ONCC 1

Hepar sulfuris, Magnesium carbonicum, Barium muriaticum , Ledum, Sequioadendron Gigant. Holz R, Calendula, Belladonna, Apis Symphytum, Hypericum, Arnica, Silicea, Staphisagria, Gelsemium, walnut tree-Essence R, pine tree-Essence R

ONCC 25

Erythrox. Coca, Gledisia tria gantos (wood), Parrotia persica, Hypericum, Gelsemium, Phosphorus, Sulfur, Zincum valeriana

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Biological Treatment Approaches

>> Vitamin D3 Hevert 4000 IU
Vitamin D3 Hevert - the power vitamin for bones, muscles, and immune defense

>> Lymphaden comp. – Rx Only
Hevert® Lymphaden comp., solution for injection, is a homeopathic drug for the improvement of conditions such as swelling of the lymph nodes, and lymphatic edema.

>> Sinusitis Hevert SL (Sinusitis Tablets)
Homeopathic medicine for inflammation of the nose and throat area

>> Arnica – Rx Only
Hevert® Arnica, solution for injection, is a homeopathic drug indicated for the treatment of muscle pain and stiffness, bruising and swelling due to injuries and overexertion.

>> Gelsemium comp. – Rx Only
Hevert® Gelsemium comp., solution for injection, is a homeopathic drug indicated for the improvement of painful nerve conditions, such as postherpetic neuralgia, trigeminal neuralgia, or sciatic nerve pain.

>> Pain Relief
Homeopathic medicine for the temporary relief of muscle pain and stiffness

1. Bone metabolism
2. Lymphatic drainage
3. Homeopathic antibiotics
4. Pain relief

Biological Treatment Approaches

>> Detox Liver
For temporary relief of liver and gallbladder symptoms

>> Detox Kidney
For temporary relief of kidney and urinary tract disorder symptoms: pain and burning sensations, and the urgency to urinate.

>> Detox Intestinum
For temporary relief of symptoms of upset stomach and indigestion

>> Hepar comp. – Rx Only
Hevert® Hepar comp., solution for injection, is a homeopathic drug indicated for the improvement of liver and biliary system disorders.

5. GI Flora, Milieu

Biological Treatment Approaches

Neuraltherapy

0,5-1 ml **Procaine** (Steigerwald-free of additives)

Important additives:

- ***Myosotis*** *comp. HEEL*
- ***Ubichinon*** *comp. HEEL*
- ***Selenase*** *pro Inj.*
- ***Arnica*** *pro Inj.*
- ***Notakehl*** *D5* SANUM
- ***Fortakehl*** *D5* SANUM
- ***Hypericum*** *HEEL*
- ***Traumeel*** *HEEL*
- *Tonsilla suis HEEL*

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Biological Treatment Approaches

Infusion Immune Therapy

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Homeopathic add on.....

- **Traumeel** HEEL
- **Ubichinon** HEEL
- **Hypophysis suis**
- **Zinkokehl**
- **Solidago**
- **Myositis** HEEL
- **Taraxacum & Hepar comp.** HEEL

1: González de Vega C, Speed C, Wolfarth B, González J. Traumeel vs. diclofenacfor reducing pain and improving ankle mobility after acute ankle sprain: amulticentre, randomised, blinded, controlled and non-inferiority trial. Int JClin Pract. 2013 Oct;67(10):979-89. PMCID: PMC4231442. 2: Toliopoulos IK, Simos Y, Bougiouklis D, Oikonomidis S. Stimulation of natural killer cells by homoeopathic complexes: an in vitro and in vivo pilot study inadvanced cancer patients. Cell Biochem Funct. 2013 Dec;31(8):713-8. doi:10.1002/cbf.2960. Epub 2013 Feb 13. PubMed PMID: 23408699. 3. Planková A, Mikus P, Havránek E. Determination of selenium in clinical plasma samples related to atopic dermatitis study by chronopotentiometric strippingmethod. Pharmazie. 2010 May;65(5):327-30. PubMed PMID: 20503922. 4. Melzig MF. [Goldenrod--a classical exponent in the urological phytotherapy].Wien Med Wochenschr. 2004 Nov;154(21-22):523-7. German. PubMed PMID: 15638071. 5. Gulfraz M, Ahamd D, Ahmad MS, Qureshi R, Mahmood RT, Jabeen N, Abbasi KS.Effect of leaf extracts of Taraxacum officinale on CCl4 induced hepatotoxicity inrats, in vivo study. Pak J Pharm Sci. 2014 Jul;27(4):825-9. PubMed PMID:25015447. 6. Thent ZC, Das S. Involvement of liver in diabetes mellitus: herbal remedies.Clin Ter. 2014;165(4):223-30. doi: 10.7417/CT.2014.1738. Review. PubMed PMID:25203338. 7. Rutten L, Mathie RT, Fisher P, Goossens M, van Wassenhoven M. Plausibility andevidence: the case of homeopathy. Med Health Care Philos. 2013 Aug;16(3):525-32. doi: 10.1007/s11019-012-9413-9. PubMed PMID: 22539134.

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Injectables from **HEVERT (homeopathy)**

BTA

directly available in the U.S.

Name	Indication
Hevert® Arnica Rx	Muscle pain, stiffness, bruising, swelling due to injuries and overexertion, scar treatment
Hevert® Calmvalera™ comp. Rx	Restlessness, sleep disorders, mild depressive states, mental exhaustion
Hevert® Gelsemium comp. Rx	Improvement of painful nerve conditions, such as postherpetic neuralgia, trigeminal neuralgia or sciatic nerve pain
Hevert® Hepar comp. Rx	Improvement of liver and bilary system disorders
Lymphaden™ comp. Rx	Improvement of conditions such as swelling of lymph nodes, lymphatic edema, post-inflammatory situations

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SEE
www.hervertusa.com
info@hevertusa.com

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Biological Treatment Approaches

Ozone Therapy

- stimulates the metabolis
- detoxifies
- works against premature aging
- helps our body respond to environmental stressors
- strengthens the immune system
- bactericidial, antiviral & antifungal

1: Santana-Rodríguez N, Llontop P, Clavo B, Fiuza-Pérez MD, Zerecero K, Ayub A, Alshehri K, Yordi NA, Re L, Raad W, Fernández-Pérez L, García-Herrera R, Huang CJ, Bhora FY. Ozone Therapy Protects Against Rejection in a Lung Transplantation Model: A New Treatment? Ann Thorac Surg. 2017 May 24. pii: S0003-4975(17)30360-0. doi: 10.1016/j.athoracsur.2017.02.054. [Epub ahead of print] PubMed PMID: 28549673. 2: Li B, Liu C, Li Y, Yang HF, Du Y, Zhang C, Zheng HJ, Xu XX. Computed tomography-guided catheter drainage with urokinase and ozone in management of empyema. World J Radiol. 2017 Apr 28;9(4):212-216. doi: 10.4329/wjr.v9.i4.212. PubMed PMID: 28529685; PubMed Central PMCID: PMC5415891. 3: Lee BH. YI Kwang Su's Love and history records of modern hospital under the japanese colonial period. Uisahak. 2016 Dec;25(3):407-444. doi: 10.13081/kjmh.2016.25.407. PubMed PMID: 28529300

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Biological Treatment Approaches

Magnetic field Therapy

- Cluttered cell ions in pathological, unhealthy cells !
- These cell ions are moved <u>in the frequency</u> of the magnetic field

→ Re-regulation and improvement of cell function and performance

- electromagnetic field system was approved by the FDA in 2004

1: Ali FM, El-Gebaly RH, Hamad AM. Combination of bacteriolytic therapy with magnetic field for Ehrlich tumour treatment. Gen Physiol Biophys. 2016 May 4. doi: 10.4149/gpb_2016051. [Epub ahead of print] PubMed PMID: 28471345. 2: Guo X, Li W, Luo L, Wang Z, Li Q, Kong F, Zhang H, Yang J, Zhu C, Du Y, You J. External Magnetic Field-Enhanced Chemo-Photothermal Combination Tumor Therapy via Iron Oxide Nanoparticles. ACS Appl Mater Interfaces. 2017 May 17;9(19):16581-16593. doi: 10.1021/acsami.6b16513. Epub 2017 May 3. PubMed PMID: 28453245. 3: Wanitphakdeedecha R, Sathaworawong A, Manuskiatti W, Sadick NS. Efficacy of multipolar radiofrequency with pulsed magnetic field therapy for the treatment of abdominal cellulite. J Cosmet Laser Ther. 2017 Jan 31:1-5. doi: 10.1080/14764172.2017.1279332. [Epub ahead of print] PubMed PMID: 28139149.

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Biological Treatment Approaches

PRGF
(Plasma Rich Growth Factor)

- release of a pool of biologically active growth factors (proteins)
- Promotion of a range of biological processes
- The therapeutic objective → improve **regenerative capacity** (cell recruitment, growth and differentiation)
- European (European CE mark) and American (FDA) Approval

1. Anitua E, Sánchez M, Orive G. Potential of endogenous regenerative technology for in situ regenerative medicine. Adv Drug Deliv Rev. 2010 Jun 15;62(7-8):741-52. 2. Leslie M. Cell biology. Beyond clotting: the powers of platelets. Science. 2010 Apr 30;328(5978):562-4. 3. Mozzati M et al., Surgical treatment of denture-induced fibrous hyperplasia with plasma rich in growth factors. J Craniofac Surg. 2015 May;26(3):772-5.

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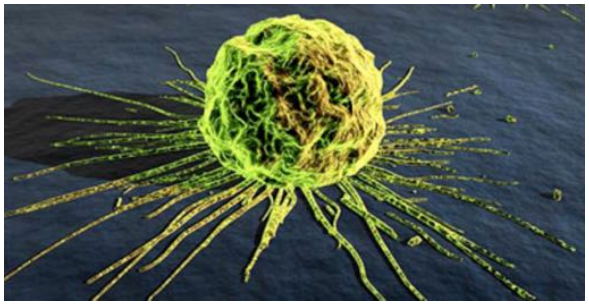
Growth Factors

Biological mediators for tissue regeneration

- Cellular migration (Chemotaxis) & Cellular Proliferation in (1,2,3)
Osteoblasts, Gingival Fibroblasts, Periodontological ligament cells
- Cellular Differentiation
- Syntheses of extrac-cellular matrix



1) +2) Anitua E, Troya M, Orive G. **Plasma rich in growth factors promote gingival tissue regeneration by stimulating fibroblast proliferation and migration and by blocking transforming growth factor-β1-induced myodifferentiation.** J Periodontol. 2012 Aug;83(8):1028-37. **An autologous platelet-rich plasma stimulates periodontal ligament regeneration.** J Periodontol. 2013 Nov;84(11):1556-66. 3) Anitua E, Tejero R, Zalduendo MM, Orive G. **Plasma rich in growth factors promotes bone tissue regeneration by stimulating proliferation, migration, and autocrine secretion in primary human osteoblasts.** J Periodontol. 2013 Aug;84(8):1180-90.

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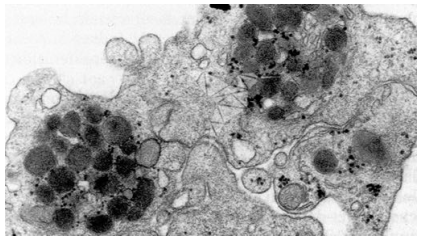
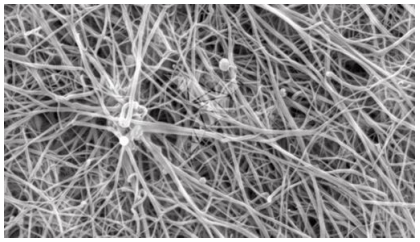
Where can we find the growth factors ?

Platelets >> Plasma >> Bone

Origin: Cytoplasmic fraction of megakaryocytes
- No nucleus, travel in blood vessels
- 100% **autologous platelet rich preparation**



Function:
- **Hemostasis** (protein delivery at the site of injury)



Regenerative potential (4,5):
- **VEGF, TGF-beta, PDGF,IGF,FGF,EGF….**
- **Fibrin scaffold(matrix): fibronectin, osteonectin….**

4) Anitua E, Sánchez M, Orive G. **Potential of endogenous regenerative technology for in situ regenerative medicine**. Adv Drug Deliv Rev. 2010 Jun 15;62(7-8):741-52.. 5) Leslie M. **Cell biology. Beyond clotting: the powers of platelets.** Science. 2010 Apr 30;328(5978):562-4.

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Biological effects

- **Hemostasis** (6)
- **Angiogenesis** (7)
- **Cell proliferation** (8)
- **Cell migration** (9)
- **Decreased inflammation** (10)
- **Bacteristatic effect** (11)
- **Reduced Pain** (12)

6) Mozzati M et al. **Surgical treatment of denture-induced fibrous hyperplasia with plasma rich in growth factors.** J Craniofac Surg. 2015 May;26(3):772-5. 7) Anitua E et al. **Infiltration of plasma rich in growth factors enhances in vivo angiogenesis and improves reperfusion and tissue remodeling after severe hind limb ischemia.** J Control Release. 2015 Mar 28;202:31-9. doi: 10.1016/j.jconrel.2015.01.029. Epub 2015 Jan 24. 8)+9) Anitua E. et al., **Plasma rich in growth factors promotes bone tissue regeneration by stimulating proliferation, migration, and autocrine secretion in primary human osteoblasts.** J Periodontol. 2013 Aug;84(8):1180-90. 10) Anitua E et al., **PRGF exerts more potent proliferative and anti-inflammatory effects than autologous serum on a cell culture inflammatory model.** Exp Eye Res. 2016 Oct;151:115-21. 11) Anitua E. Et al., **Antibacterial effect of plasma rich in growth factors (PRGF®-Endoret®) against Staphylococcus aureus and Staphylococcus epidermidis strains.** Clin Exp Dermatol. 2012 Aug;37(6):652-7. 12) Giacomello M. et al., . **Temporomandibular joint disorders treated with articular injection: the effectiveness of plasma rich in growth factors-Endoret**J Craniofac Surg. 2015 May;26(3):709-13.

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„Neuraltherapy“ and it´s Application in Integrative Dentistry

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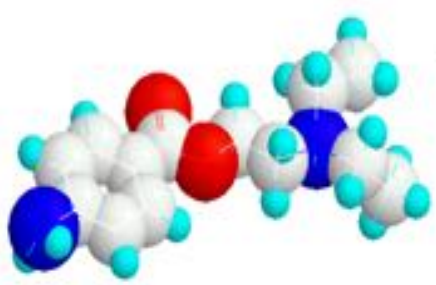
Procain

Overview of the most important pharmacological and clinical features

- Poor of side effects
- Low half life period
- Low toxicity
- Local anesthesia
- Endo anesthesia
- sympathico-lytic
- vascular Dilatation
- Broncho-spasmolytic
- Increase of coronary perfusion
- negative inotrop and anti-arrhythmic
- Anti-inflammatory
- Anti-rheumatic
- Anti-cancerous
- Vitalization



Acceptance

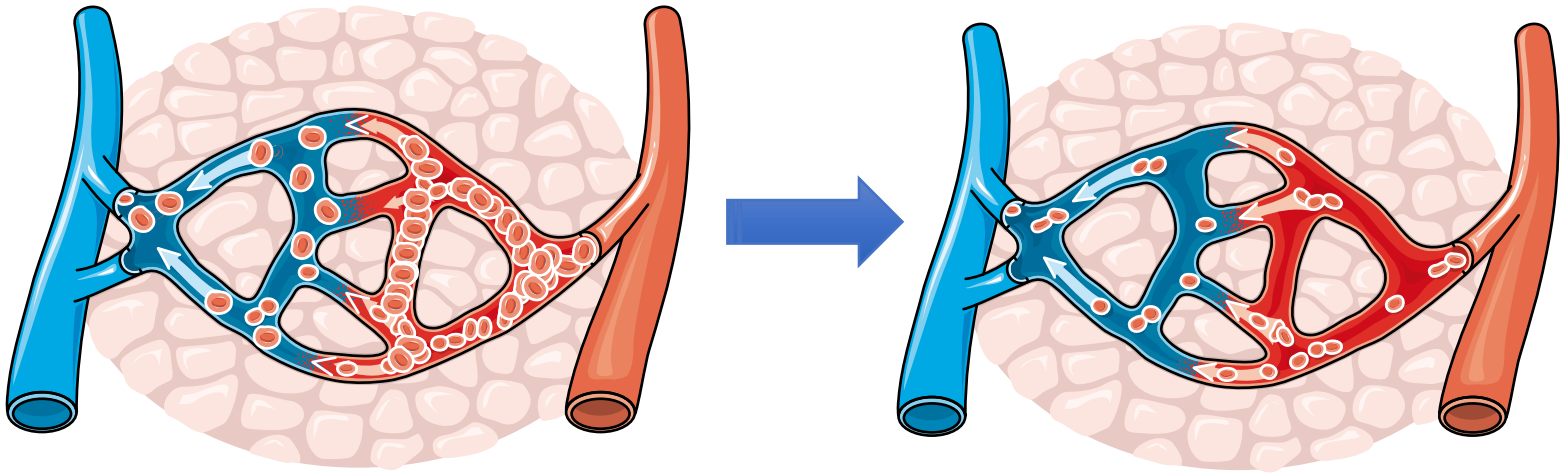
Neural Therapy
Pain Therapy
RR - Regulation
Lung Function

Heart function
autoimmune
Diseases, pcP,
Tumor Therapy
Well-Aging

very SAFE and high therapeutic effects

- least toxicity of local anaesthetics
- relevant side effects very seldom

Upregulation of Microangioperfusion



Inhibition of Inflammation (also neurogenic)

Strong anti-oxidative and fat-reducing effect

Antirheumatic and Joint protective effect

- Dose-dependend inhibition of Interleucin-6-production and T-Cell – Proliferation with the clinical observation of significant CRP reduction

Release and to Reset the autonomic nervous system ANS (neural therapy effect)

- injected into the area of blockage
- the body moving from a blocked state to a state of homeostasis
- It improves flow between the sympathetic and parasympathetic branches of the ANS (sympatholitc)

Reduction of Side Effects from

- **Chemotherapy**
- **Radiotherapy**

Vitalisation, „ASLAN“ Anti-aging effect

due to influencing mitochondral function

wide therapeutic effect on nervous, cardiovascular, locomotor,

cutaneous and gastrointestinal diseases in elderly people

Antidepressant

Anxiety loss

Emotional Relaxing (Balancing of neurotransmit. metabolism in limbic system)

Stabilization and Conservation of Cell Membranes

Cancer Inhibition & Prevention

Procaine is a DNA-demethylating Agent with Growth-inhibitory Effects in Human Cancer Cells

Procaine Is a DNA-demethylating Agent with Growth-Inhibitory Effects in Human Cancer Cells[1]

Ana Vilar-Garcea, Maria F. Fraga, Jesus Espada, and Manel Esteller[2]

ABSTRACT

Cancer Research

Fields of Application in Dentistry

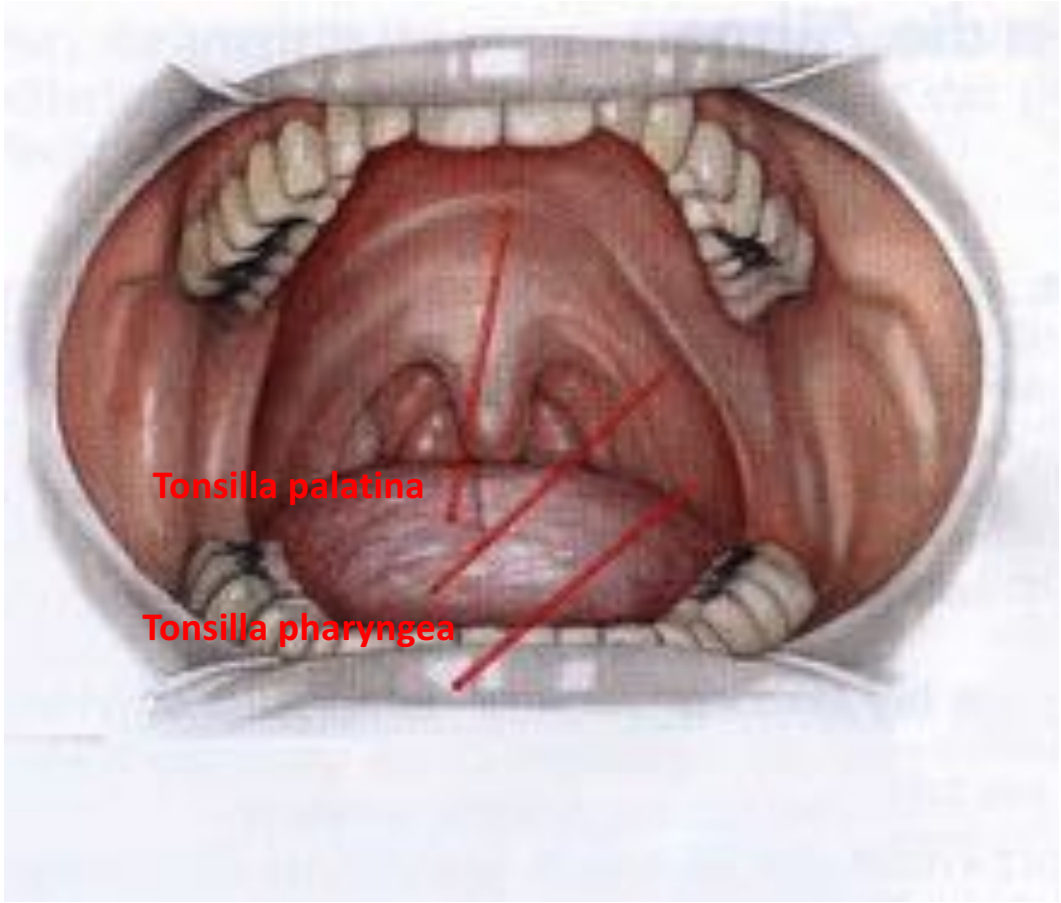
buccal

palatinal

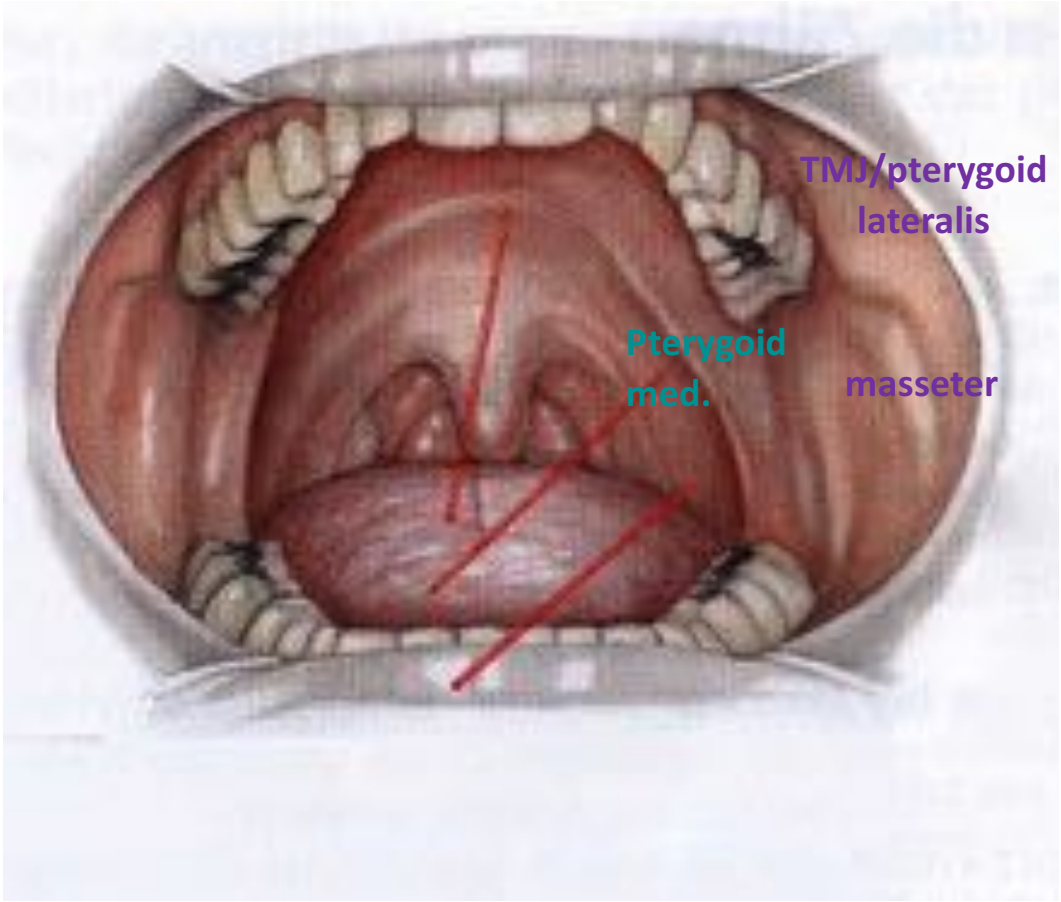
- Periodontitis
- Pulpitic pain
- CMD
- Occlusal trauma
- Before/after extraction
- Neuralgia

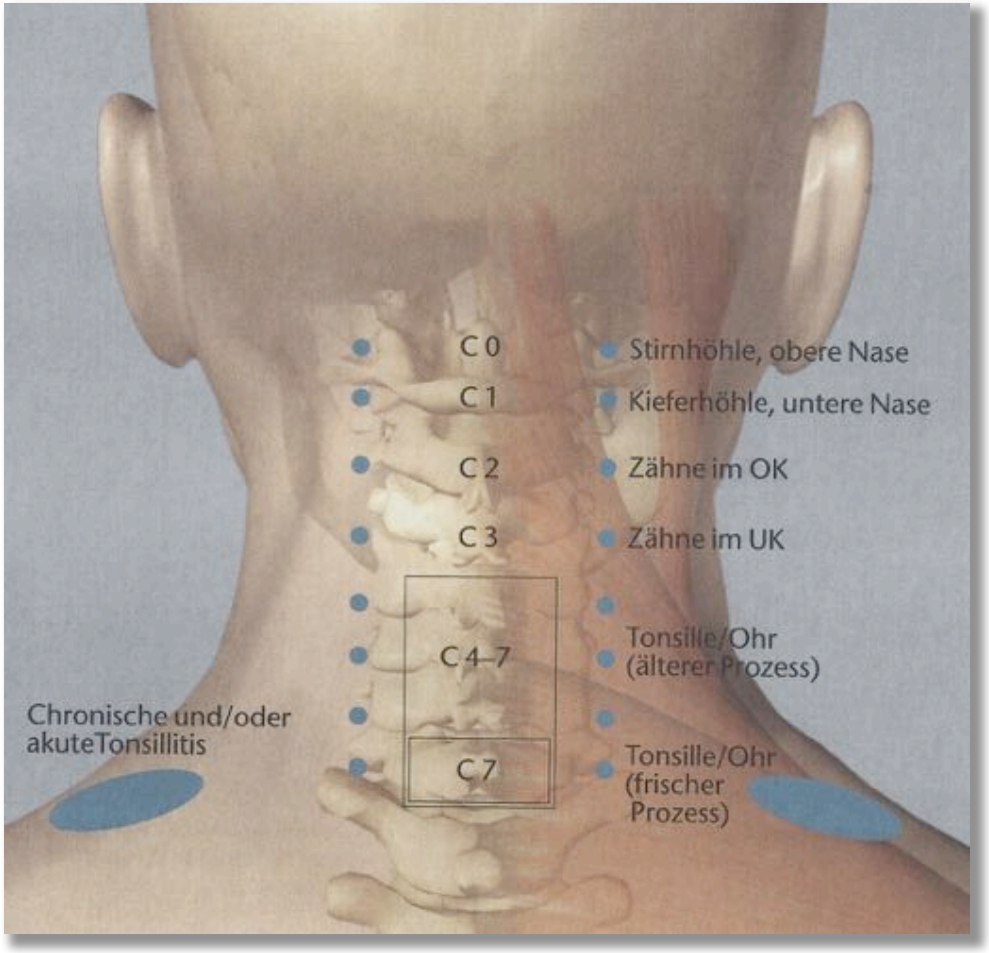
Intraligamental

- Periodontitis
- Pulpitic pain (reversible <irreversible)
- Pre extraction
- Neuralgia
- Occlusal Trauma
- CMD



- Tonsillitis
- Infection ENT
- Scar relieve after tonsillectomy


TMJ/pterygoid
lateralis
Pterygoid
med.
masseter



Search for interfering fields of head and neck

(after **ADLER & LANGER**)

C0 – sinus frontalis, upper nose

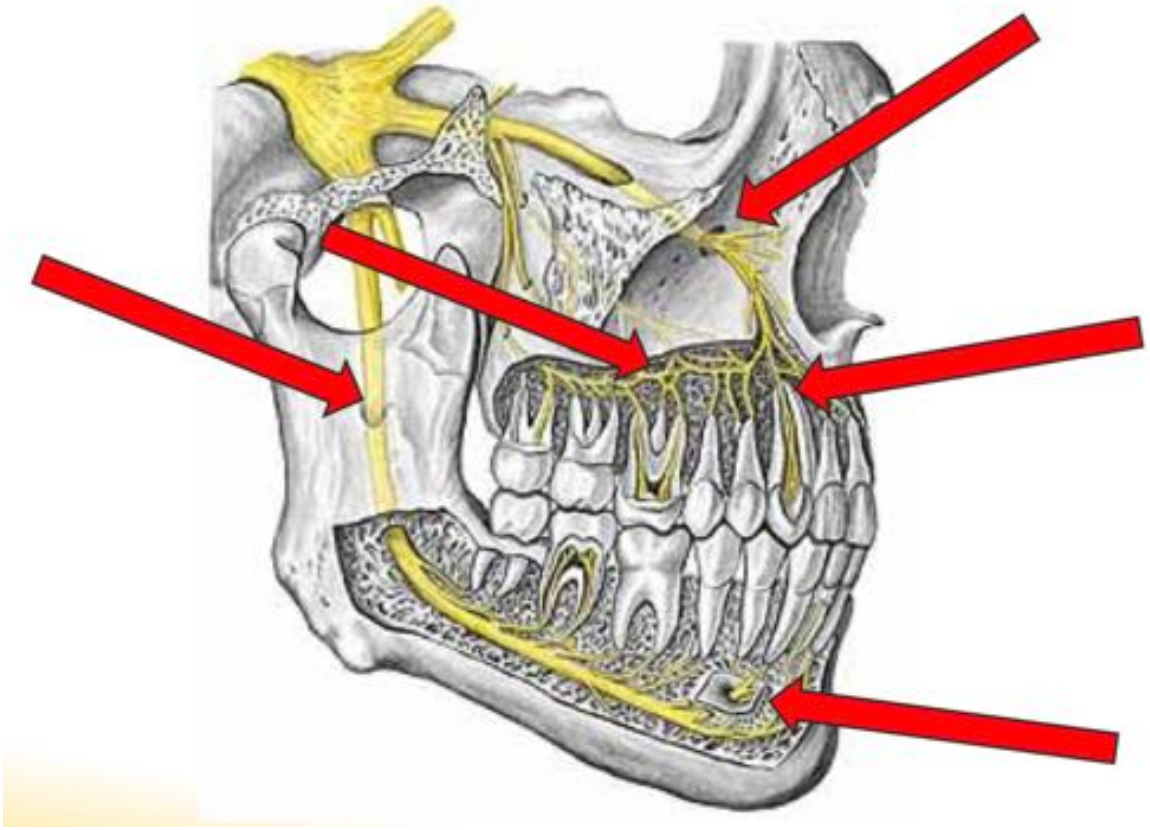
C1 – sinus maxillaris, lower nose

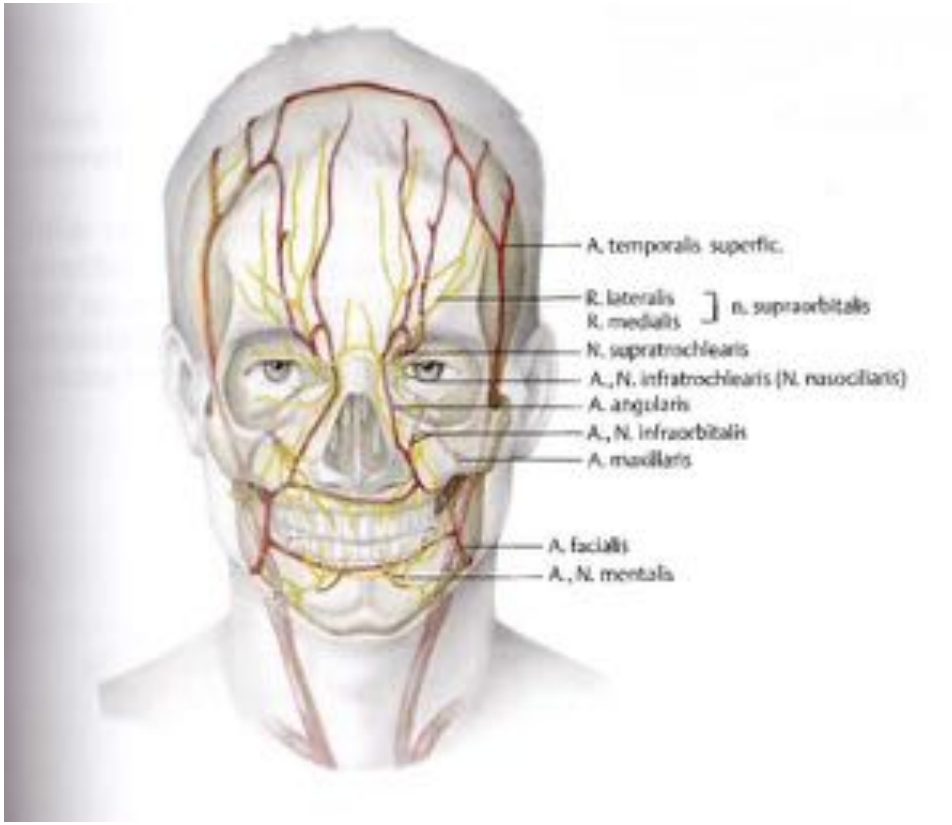
C2 – teeth upper jaw

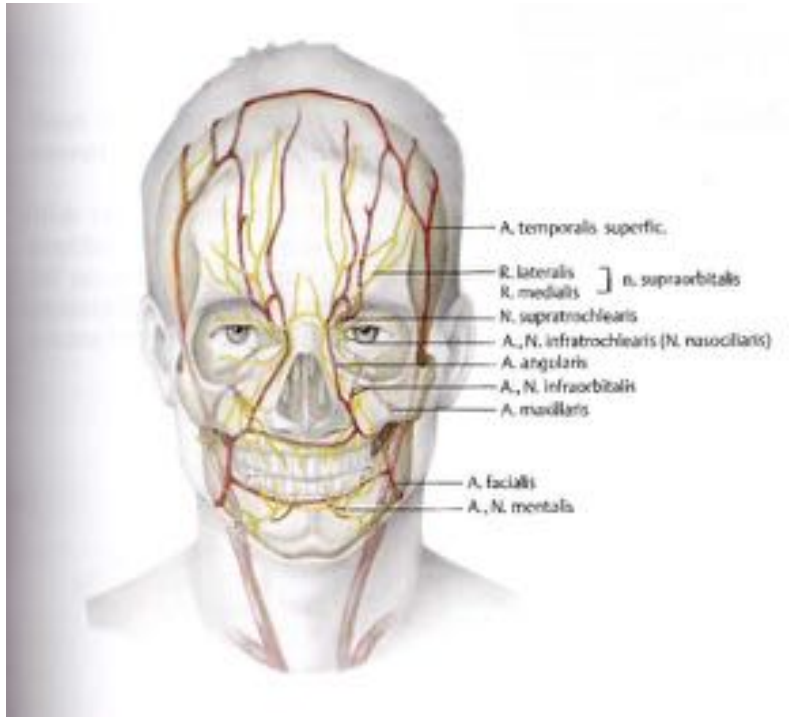
C3 – teeth lower jaw

C4-7 – tonsils, ear (old process)

C7 – tonsils / ear (acute process)




A. temporalis superfic.
R. lateralis
R. medialis
n. supraorbitalis
N. supratrochlearis
A., N. infratrochlearis (N. nasociliaris)
A. angularis
A., N. infraorbitalis
A. maxillaris
A. facialis
A., N. mentalis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A., N. infratrochlearis (N. nasociliaris)
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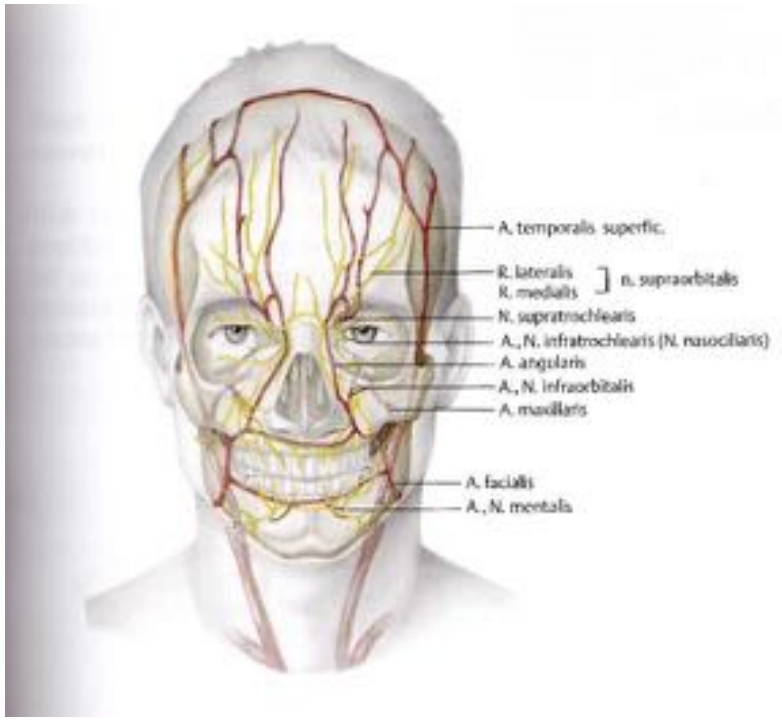
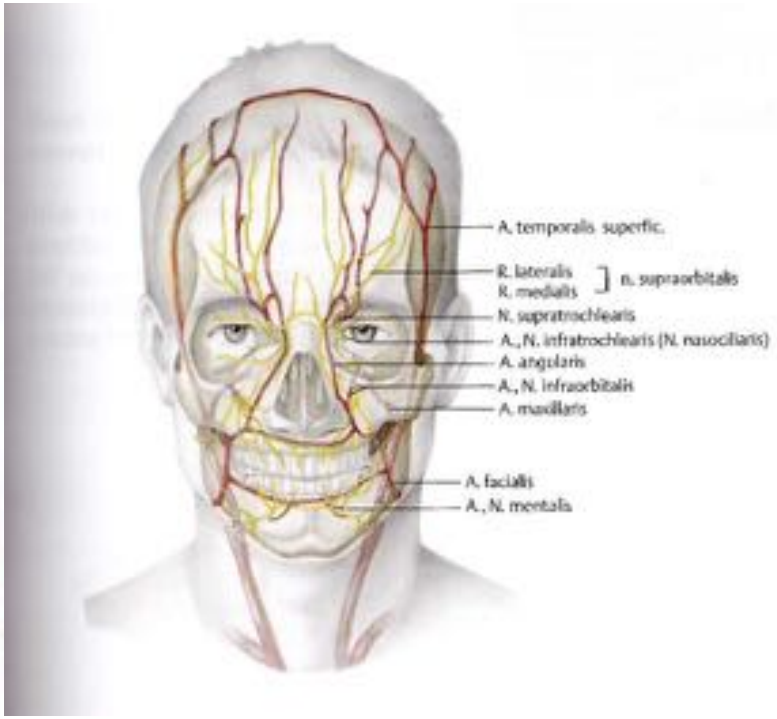
A., N. infraorbitalis
A. maxillaris
A. facialis
A., N. mentalis

N. supraorbitalis



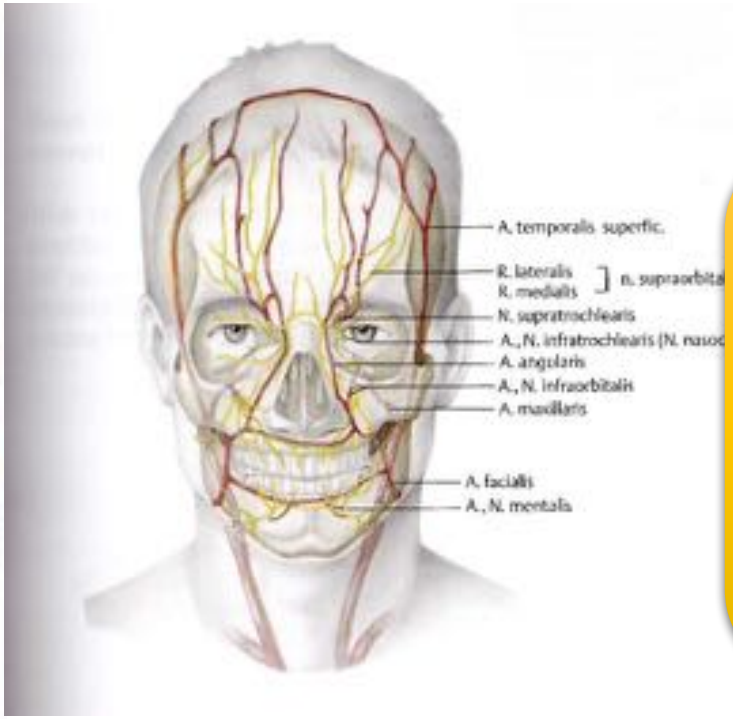
- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis

N. supratrochlearis



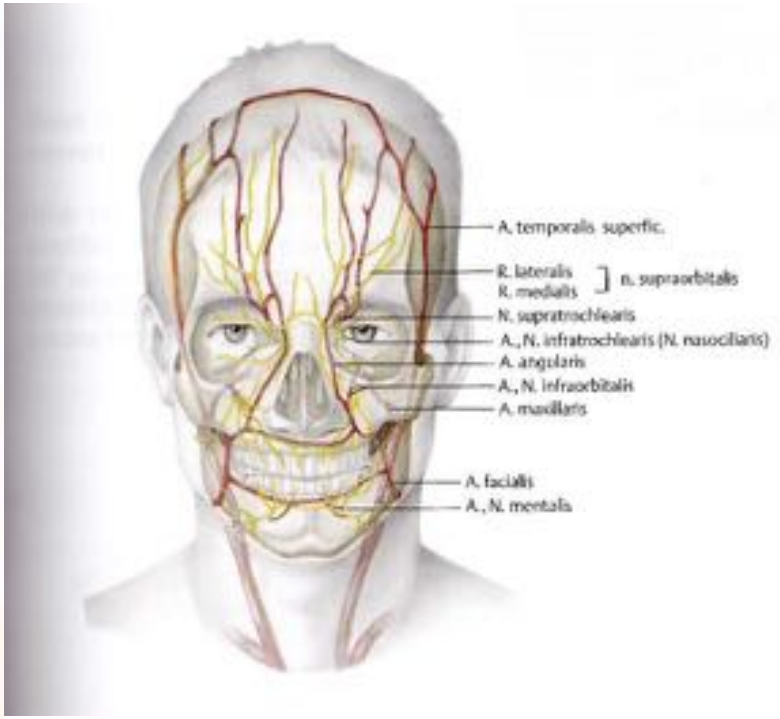
- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis

N. nasociliaris



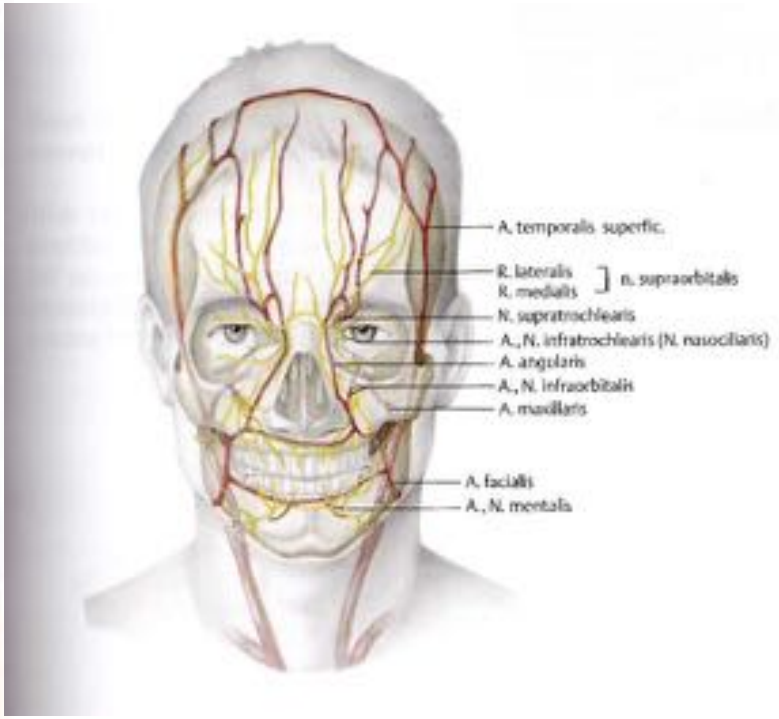
- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis

N. infraorbitalis



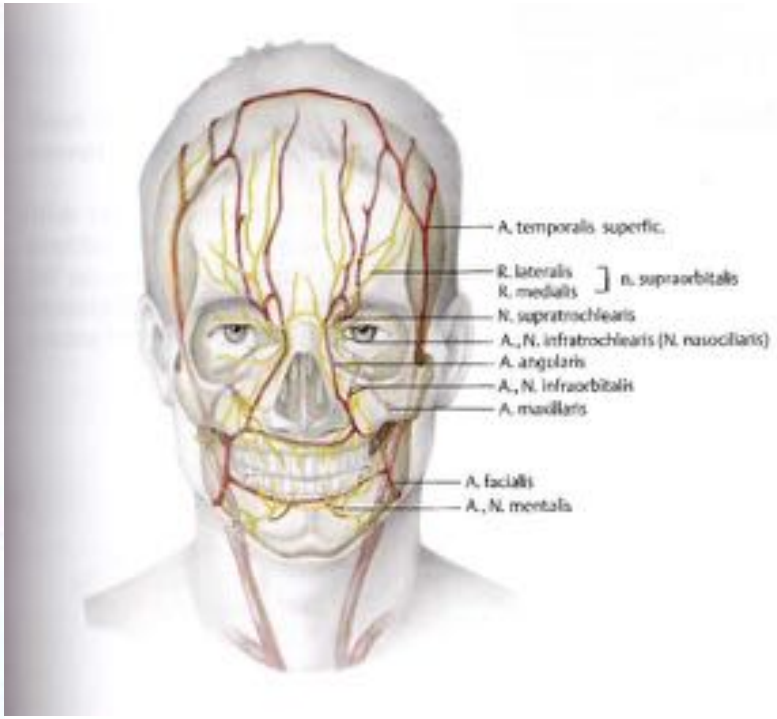
- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis

N. infraorbitalis

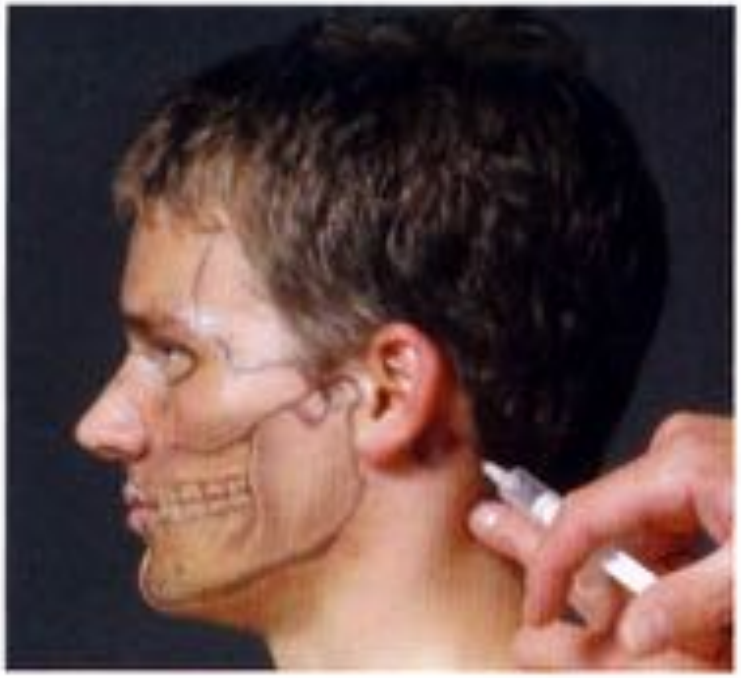


- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis

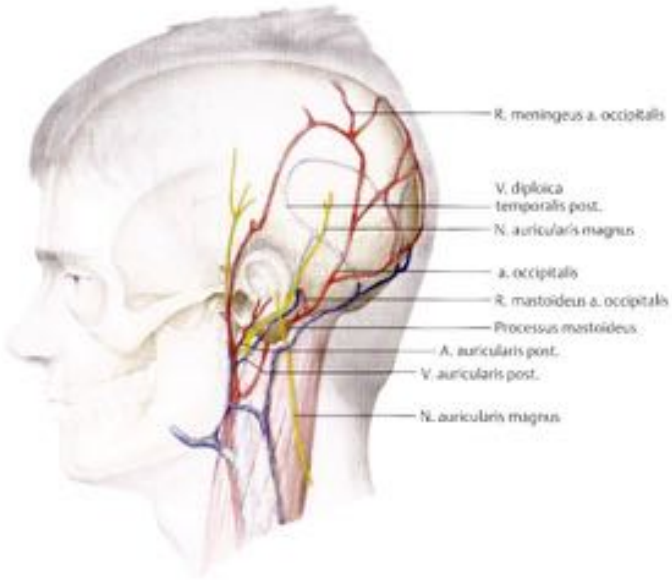
N. mentalis



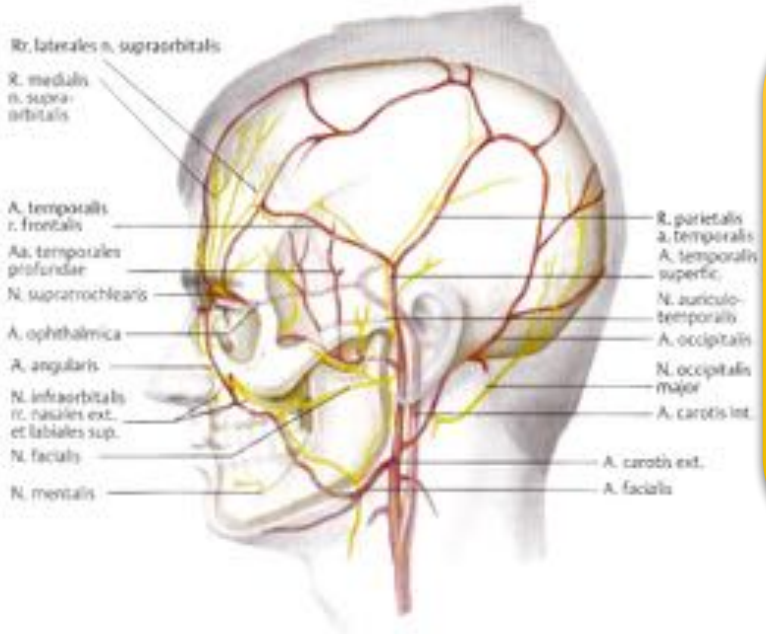
- Trigeminal neuralgia
- Forehead,eye, jaw pain
- Rhinitis
- Acute sinusitis
- Chronic sinusitis



Processus mastoideus

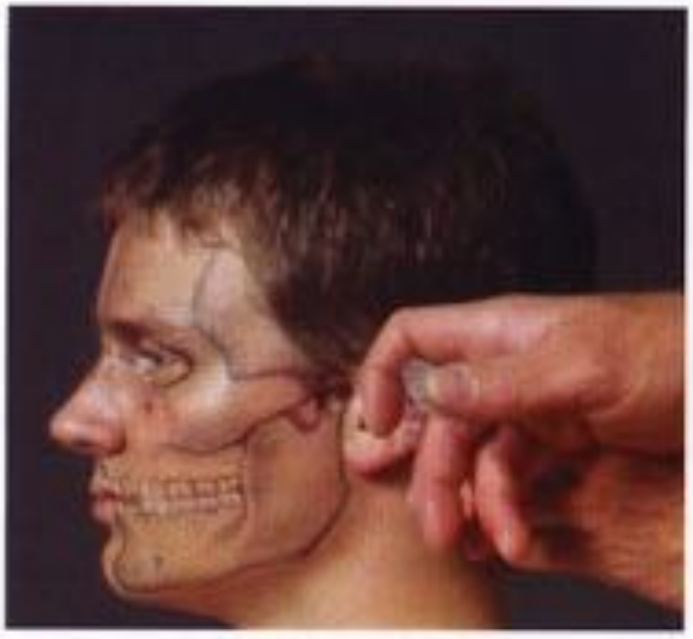


- Otitis media or externa
- Tinnitus
- Vertigo

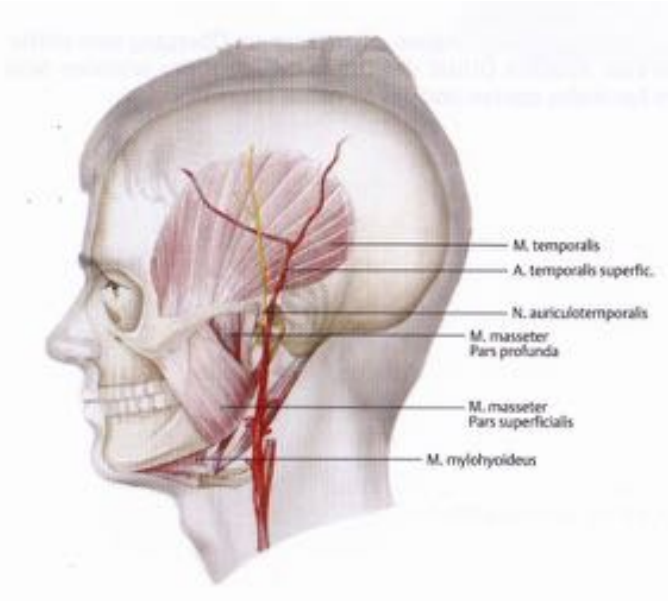


- Arteritis temporalis
- Migraine
- Neuralgia
- Perfusion disorders CNS

A. Temporalis sup/ A. facialis/ N.auricolotemporalis

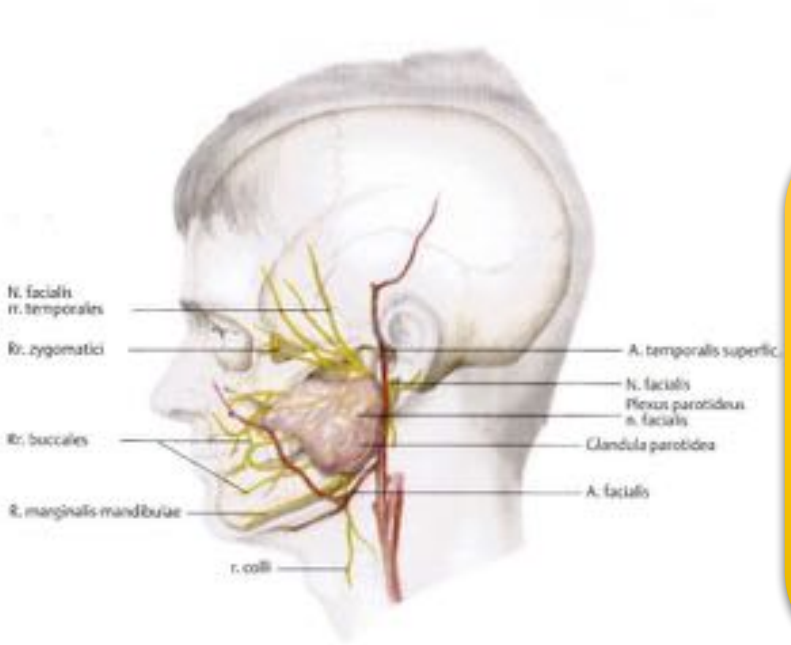


Injection TMJ

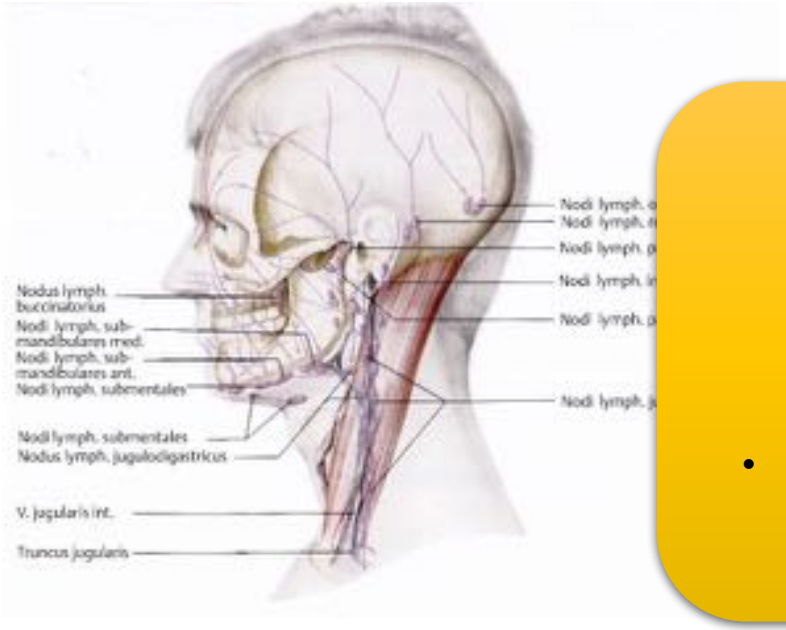


- Degenerative jaw joint disorders (Arthritis,Arthosis,Arthralgia)
- CMD
- Otitis media,externa

Glandula parotidea



- Disorders of the parotid gland (epidemica,hyperplasia)
- Sialadenitits
- Sialosis



- Sinusitis
- Tonsillitis
- Mastoiditis
- Otitis media
- Infections of the oral cavity & teeth

Lymphatic drainaige head and neck region

Combination of therapeutic remedies at Alpstein Clinic

- 0,5-1 ml **Procaine** (Steigerwald-free of additives)

Important additives:

- ***Myosotis*** *comp. HEEL*
- ***Ubichinon*** *comp. HEEL*
- ***Selenase*** *pro Inj.*
- ***Arnica*** *pro Inj.*
- ***Notakehl*** *D5* SANUM
- ***Fortakehl*** *D5* SANUM
- ***Hypericum*** *HEEL*
- ***Sinusitis Injeel*** *HEEL*
- *Tonsilla suis HEEL*

Hevert Products
Biological Remedies

Injectables from **HEVERT (homeopathy)**

directly available in the U.S.

Name	Indication
Hevert® Arnica Rx	Muscle pain, stiffness, bruising, swelling due to injuries and overexertion, scar treatment
Hevert® Calmvalera™ comp. Rx	Restlessness, sleep disorders, mild depressive states, mental exhaustion
Hevert® Gelsemium comp. Rx	Improvement of painful nerve conditions, such as postherpetic neuralgia, trigeminal neuralgia or sciatic nerve pain
Hevert® Hepar comp. Rx	Improvement of liver and bilary system disorders
Lymphaden™ comp. Rx	Improvement of conditions such as swelling of lymph nodes, lymphatic edema, post-inflammatory situations

More information:
SEE
www.hervertusa.com
info@hevertusa.com

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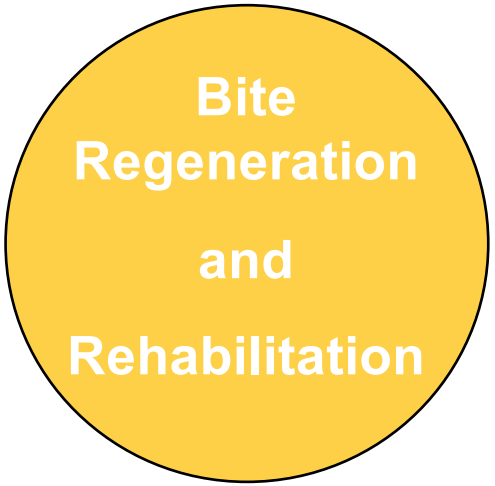
The 4 pillars of „Integrative Biological Medicine“



in Dentistry

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What to do when teeth are missing ?

Rehabilitation of bite and function according to **physiological limits** and standards

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Before you start permanent replacement of missing teeth check following parameters....

especially important for patients with systemic chronic diseaes and cancer formation
(NO more room for compensation, therefore therapy has immediate effect on health (positive & negative))

- **Craniomandibular System (Management of CMD)**
- **Pros and Cons of removable vs. fixed dental Appliances**
- **How to replace missing tooth surfaces**
- **Artficial tooth roots**

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Craniomandibular System

is a

structural, functional, biochemical & psychological

regulatory system between **teeth, jaw, neck, spine muscles** and **temporomandibular joint function**

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„Craniomandibular Dysfunction (CMD)“

Also known as:
Temporo Mandibular Joint Dysfunction (TMJD)

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Craniomandibular Dysfunction is a term describing painful or painfree complaints based on

- **Structural**
- **Functional**
- **Biochemical**
- **Psychological**

disregulation between **jaw, neck, spine muscles** and **temporomandibular joint function**

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Three main categories (1-4):

1. **Myofascial pain** (discomfort or pain in the muscles)
<-- triggered by chronic systemic diseases/cancer

2. **Internal derangement of the joint** (displaced disc, dislocated jaw, or injury to the condyle)

3. **Degenerative/inflammatory joint disorders** (arthritis, arthralgia, arthrosis)
<-- triggered by chronic systemic diseases/cancer

1. Kares H, Schindler HJ, Schöttl R. Der etwas andere Kopf- und Gesichtsschmerz, Craniomandibuläre Dysfunktionen, CMD. Hannover: Schlütersche 2001. 2) Okeson JP. Bell's Orofacial Pains, 6th ed. Chicago: Quintessence Publishing 2005. 3) Reißmann DR, John MT. Ist Kiefergelenkknacken ein Risikofaktor für Schmerzen im Kiefergelenk? Schmerz 2007;21:131-138. 4) Türp JC, Nilges P. Diagnostik von Patienten mit chronischen orofazialen Schmerzen. Quintessenz 2000;51:721-727.

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Signs and Symptoms (three cardinal) (5,6,7):

1. **Pain and tenderness** on palpation in the muscles of mastication, or of the joint, neck and spine muscles
2. **Limited range** of mandibular movement (jaw lock, stiffness)
3. **Noises** during mandibular movement (clicking, popping, crepitus)

4. Headache,migraine,diminished auditory acuity (hearing loss), Tinnitus, dizziness, sensation of malocclusion

5. TMJ Disorders, National Institute of Dental and Craniofacial Research 6. Mujakperuo HR, Watson M, Morrison R, Macfarlane TV (2010). "Pharmacological interventions for pain in patients with temporomandibular disorders". The Cochrane Database of Systematic Reviews (10): CD004715. PMID 20927737. 7. Guyatt G, Cairns J, Churchill D et al. (Evidence-Based Medicine Working Group) Evidence based Medicine. A new approach to teaching the practice of medicine. JAMA 1992; 268:2420–2425

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Causes (8,9,10):

- Psychosocial factors (like emotional stress, overactive sympathetic system, depression and so on....)
- Genetic predisposition
- Bruxism/Grinding (parafunctional activity)
- Occlusal factors
- Hormonal factors
- Ass. with chronic systemic diseases (like IBS, RA, **cancer** and so on....)

8. Scully, Crispian (2008). Oral and maxillofacial medicine : the basis of diagnosis and treatment (2nd ed.). Edinburgh: Churchill Livingstone. pp. 8,14,30,31,33,101,104,106,291–295,338,339,351. 9. Helkimo M. Studies on function and dysfunction of the masticatory system IV. Age and sex distribution of symptoms of dysfunction of the masticatory system in Lapps in the north of Finland. Acta Odont Scand 1974;32:255–267. 10. Huang GJ, LeResche L, Critchlow CW et al. Risk factors for diagnostic subgroups of painful temporomandibular disorders (TMD). J Dent Res 2002;81:284–288.

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Causes in term of „integrative biological dentistry“ (12)

- Light smog (decreased melatonin production)
- Chronic CNS irritation
- Bad diet, high acidity, alcohol, smoking,
- „Psycho stress“ (mobbing, relationship problems, conflicts)
- Galvanicity
- Toxic load by organic, inorganic toxins
- Dysbiosis
- “Yan“ over and „Yin“ under expressed
- Disregulation in the area of pelvis, spine, shoulder

→ **All causes/factors are profound in chronic systemic diseases/cancer**

12. Liu F, Steinkeler A. Epidemiology, diagnosis, and treatment oftemporomandibular disorders. Dent Clin North Am. 2013 Jul;57(3):465-79. doi:10.1016/j.cden.2013.04.006. Review. PubMed PMID: 23809304.

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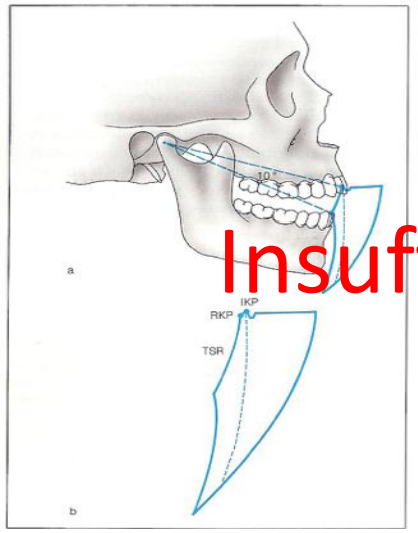
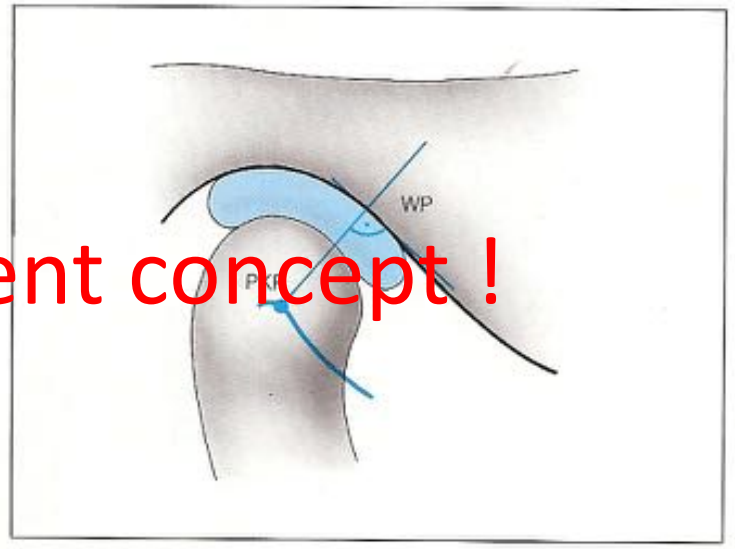
Concept 1

Gnathology – the classical concept

„The jaw relationship is only related to the mandibular condyles attached to temporal/articular fossa “





Insufficient concept !

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Concept 2

- „Myocentric“ (after Jankelson)– the concept of Integrative Biological Medicine
  - „The jaw relationship is depending on all skeletal muscles and therefore is a ***„dynamic structure“***
  - „The jaw position can only be determined by the *resting balance position* (***myocentric***)“
  - „The resting balance position of the jaw can only be achieved by complete *relaxation of the entire muscolosceletal system (jaw, neck, spine)*“

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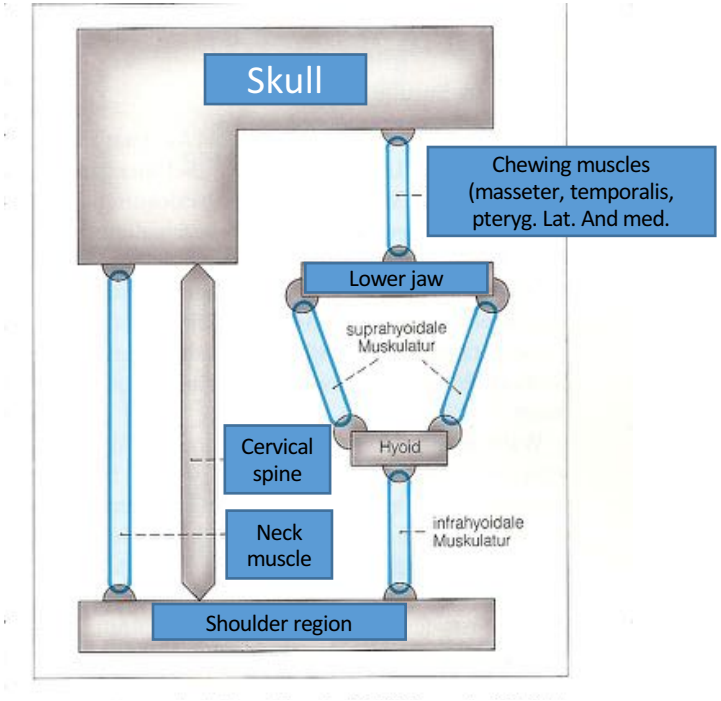
…which is under constant neurosensory control



- Stabilisation of the skull and lower jaw according to Brodie

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To summarize.....

Mandibular posture
integrative/integral part of the human body´s posture

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Classical Treatment aspects (13-15)

Conventional medicine and dentistry

•Psychotropics / Neuroleptics / Sedatives

•Psychological-psychiatric therapy

•Physiotherapy

•Analgetics, up to opioids in heavy cases

•Surgical procedures in case of radiating neck, chest problems (operation to the jaw joint and temporal fossa)

•Dental aspects : Splint therapy (Michigan splint, physiotherapy, self-conditioning)

13. Sackett DL, Rosenberg WMC, Gray JAM, Haynes RB, Richardson WS. Evidence-based medicine: What it is and what it isn´t. Brit med J 1996;312:71–72. 14. Schindler HJ, Türp HJ, Sommer C, Kares H, Nilges P, Hugger A. Therapie bei Schmerzen der Kaumuskulatur. Empfehlungen zum klinischen Management. Schmerz 2007;21:102-115. 15. Schokker RP, Hansson TL, Ansink BJ. Craniomandibular disorders in patients with different types of headache. J Cranomandib Disord 1990;4:47-51.

Integrative Treatment aspects (16-18)

Integrative biological medicine and dentistry

•Structural detoxification also oral cavity (dentist)

•Reregulation of Acid-base pH Balance

•Rebalance of intestinal flora

• Liver detox and general cellular regeneration

•Psychokinesiology

•Psychosomatic, psychoemotional conditioning

•Magnesium, Vitamin B6, Manganese,Folic acid, Calcium, Alkaline salts

•Systemic treatment with **acupuncture, TCM, homeopathy** (descelerate yang, stimulate Yin)

16: La Touche R, Goddard G, De-la-Hoz JL, et al. (2010). "Acupuncture in the treatment of pain in temporomandibular disorders: a systematic review and meta-analysis of randomized controlled trials". *The Clinical Journal of Pain*. **26** (6): 541–50. PMID 20551730. 17. Laurence B (March 2012). "Acupuncture may be no more effective than sham acupuncture in treating temporomandibular joint disorders". *The Journal of Evidence-based Dental Practice*. **12** (1): 2–4. PMID 22326146. 18. DeVocht JW (March 2006). "History and overview of theories and methods of chiropractic: a counterpoint". *Clinical Orthopaedics and Related Research*. [illegible]

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Integrative Treatment aspects (19-29)

Interdisciplinary approach (Dentist and Doctor):

- **Craniosacral Osteopathy**
- **Myoreflextherapy** combined with **neuraltherapy**
- **Myocentric splint** after **TENS**
- Self conditioning

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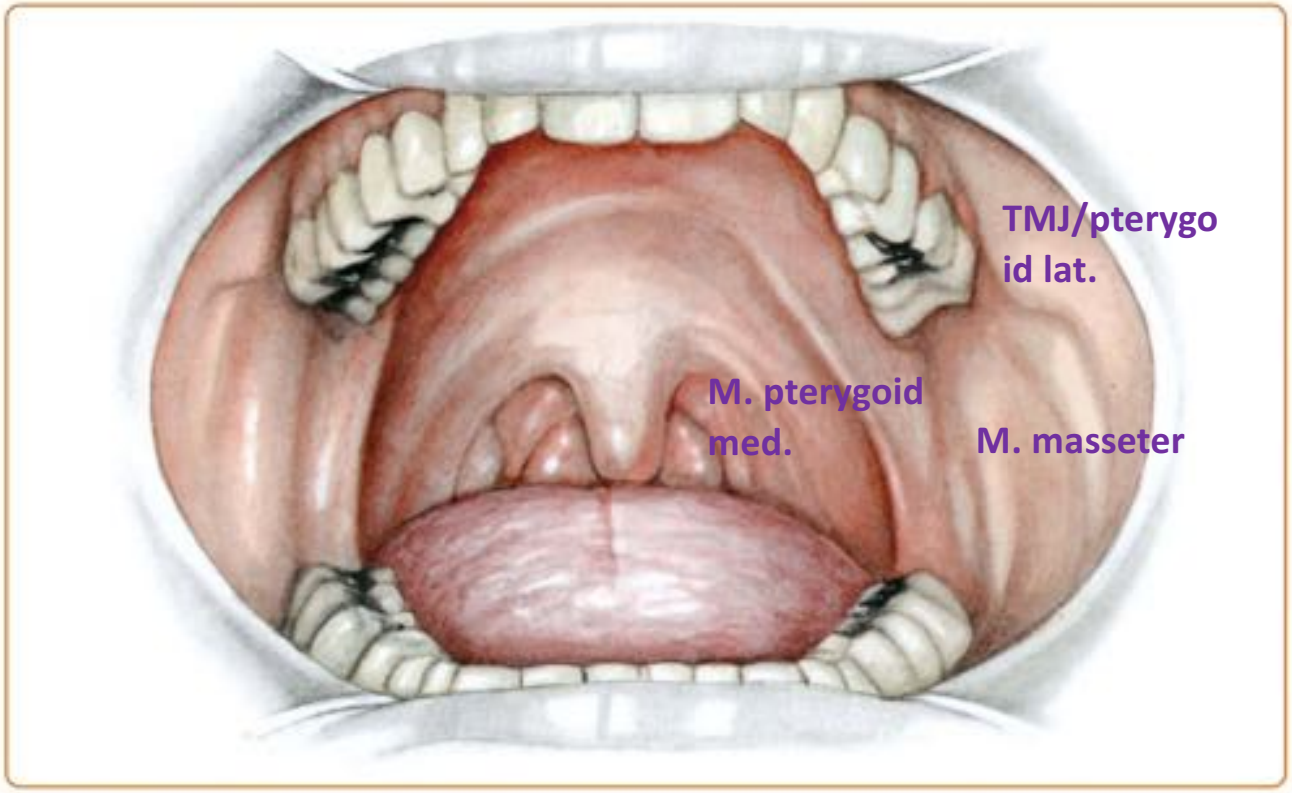
Neuraltherapy: muscles of mastication



- 0,5-1 ml **Procaine**
- (Steigerwald-free of additives)

Important additives:

- ***Myosotis*** *comp. HEEL*
- ***Ubichinon*** *comp. HEEL*
- ***Selenase*** *pro Inj.*
- ***Arnica*** *pro Inj.*
- ***Notakehl*** *D5* SANUM
- ***Fortakehl*** *D5* SANUM
- ***Hypericum*** *HEEL*
- ***Sinusitis Injeel*** *HEEL*
- *Folliculi lymphatici* SANUM
- *Tonsilla suis HEEL*

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Hevert Products
Biological Remedies

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Injectables from **HEVERT (homeopathy)**

directly available in the U.S.

Name	Indication
Hevert® Arnica Rx	Muscle pain, stiffness, bruising, swelling due to injuries and overexertion, scar treatment
Hevert® Calmvalera™ comp. Rx	Restlessness, sleep disorders, mild depressive states, mental exhaustion
Hevert® Gelsemium comp. Rx	Improvement of painful nerve conditions, such as postherpetic neuralgia, trigeminal neuralgia or sciatic nerve pain
Hevert® Hepar comp. Rx	Improvement of liver and bilary system disorders
Lymphaden™ comp. Rx	Improvement of conditions such as swelling of lymph nodes, lymphatic edema, post-inflammatory situations

More information:
SEE
www.hervertusa.com
info@hevertusa.com

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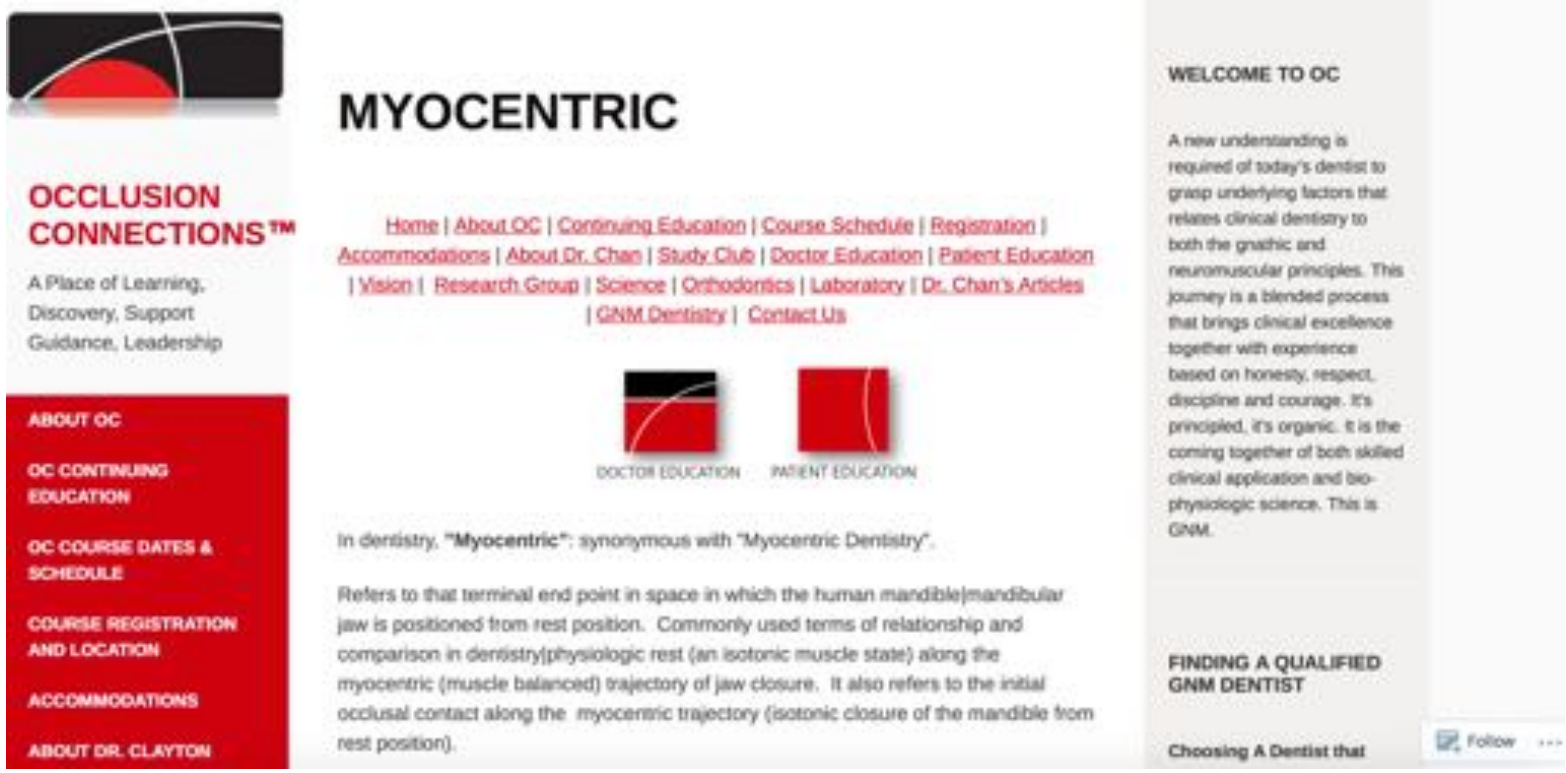

https://occlusionconnections.com/neuromuscular-dentistry/myocentric/

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Pros and Cons

Removable vs. Fixed

Dental Appliances

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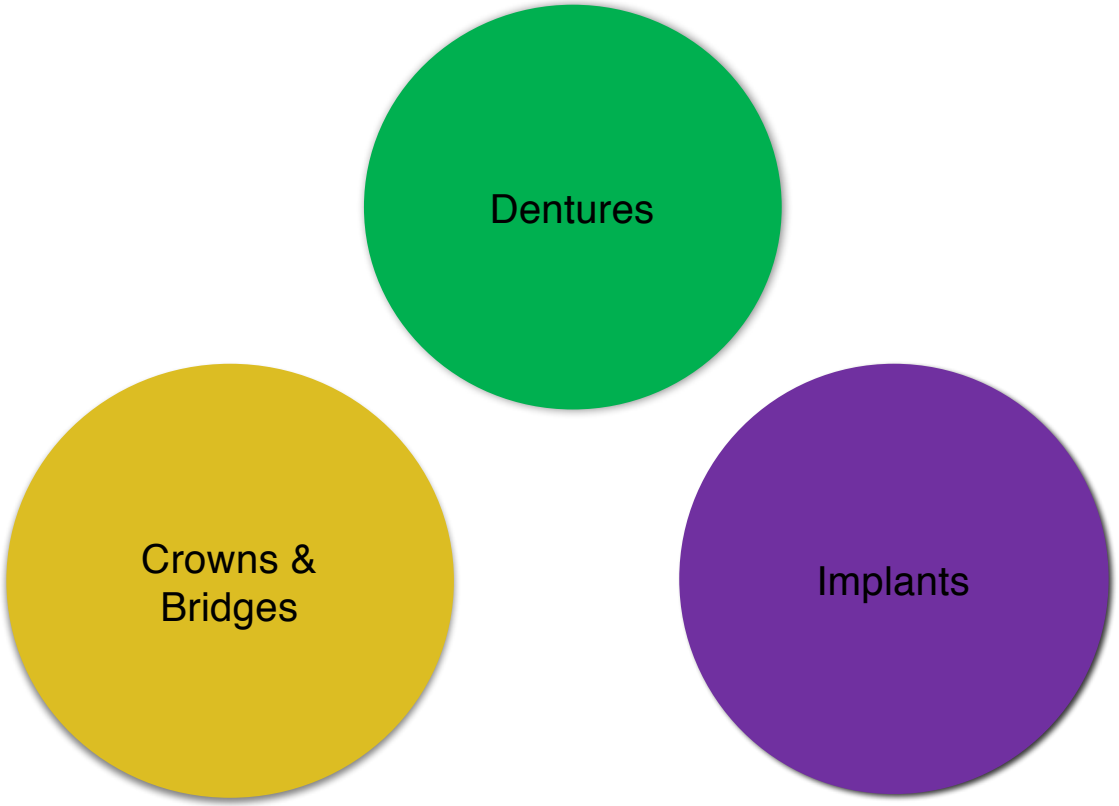
Replacement of missing teeth



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PEEK Denture

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Tooth replacement		Advantages	Disadvantages
Dentures		Cheap	Allergies, poor aesthetics, poor long term outcome and life quality Decay und tooth loosening
Crowns & Bridges		Minimal allergies Optimal aesthetics, optimal longlife and & success rate Stabilisation of CMS	Expensive 10% of teeth can become avital after preparation Bone wasting NO stimulation of meridians, where teeth are missing
Implants		Optimal Bite and Chewing function Stimulation of meridians Stimulation of bone & gingiva Stabilisation of CMS	Expensive Bone augmentation requirement especially before placing implants **Foreign Body !**

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„Myocentric - CMD - Rehabilitation“

- „Myocentric“ (after Jankelson)– the concept of Integrative Biological Dentistry
- „The jaw relationship is depending on all skeletal muscles and therefore is a ***„dynamic structure“***
- The jaw position can only be determined by the *resting balance position* (***myocentric***)

- **Symmetrically balanced jaws require teeth !!!!!**

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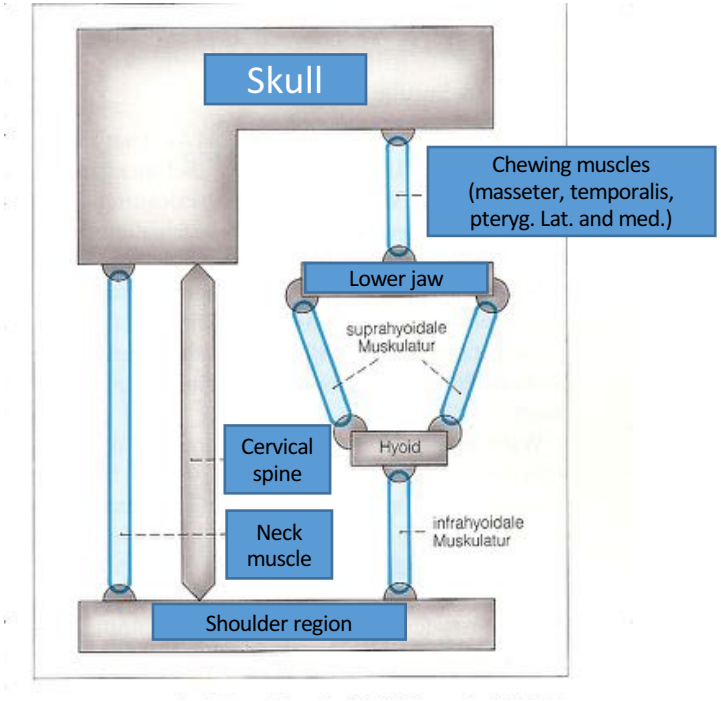
…which is under constant neurosensory control



- Stabilisation of the skull and lower jaw according to Brodie

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from the whole body/holistic point of view we require…….

Functional Teeth/Surfaces

or

Artificial tooth roots

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How to replace missing tooth surfaces?

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- Composite filling materials

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Why ceramics ?

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Advantages	Disadvantages
biocompatible (XXX)	preparation
superior aesthetics(XXXI)	Attrition with antagonists
optimal longterm lifetime (XXXII)	**Ceramic fargility/brittleness(XXXIV)**
optimale sealage (XXXIII)	Complex manufacturing process
Stabilisation of tooth structure	More expensive
diminished abrasion	

Reference:XXX) **Bartolome JF et al.,**In vitro and in vivo evaluation of a new zirconia/niobium biocermet for hard tissue replacement. Biomaterials. 2016 Jan;76:313-20. XXXI) **Vanlioglu BA et al.,** Esthetic outcome evaluation of maxillary anterior single-tooth bone-level implants with metal or ceramic abutments and ceramic crowns. Int J Oral Maxillofac Implants. 2014 Sep-Oct;29(5):1130-6. XXXII) **Layton DM et al.,**The up to 21-year clinical outcome and **survival** of feldspathic porcelain veneers: accounting for clustering. Int J Prosthodont. 2012 Nov-Dec;25(6):604-12. XXXIII) **Li W et al.,**Strength degradation and lifetime prediction of dental zirconia ceramics under cyclic normal loading. Biomed Mater Eng. 2015;26 Suppl 1:S129-37. XXXIV) **Nascimento Cd et al.,** Bacterial adhesion on the titanium and zirconia abutment surfaces. Clin Oral Implants Res. 2014 Mar;25(3):337-43.

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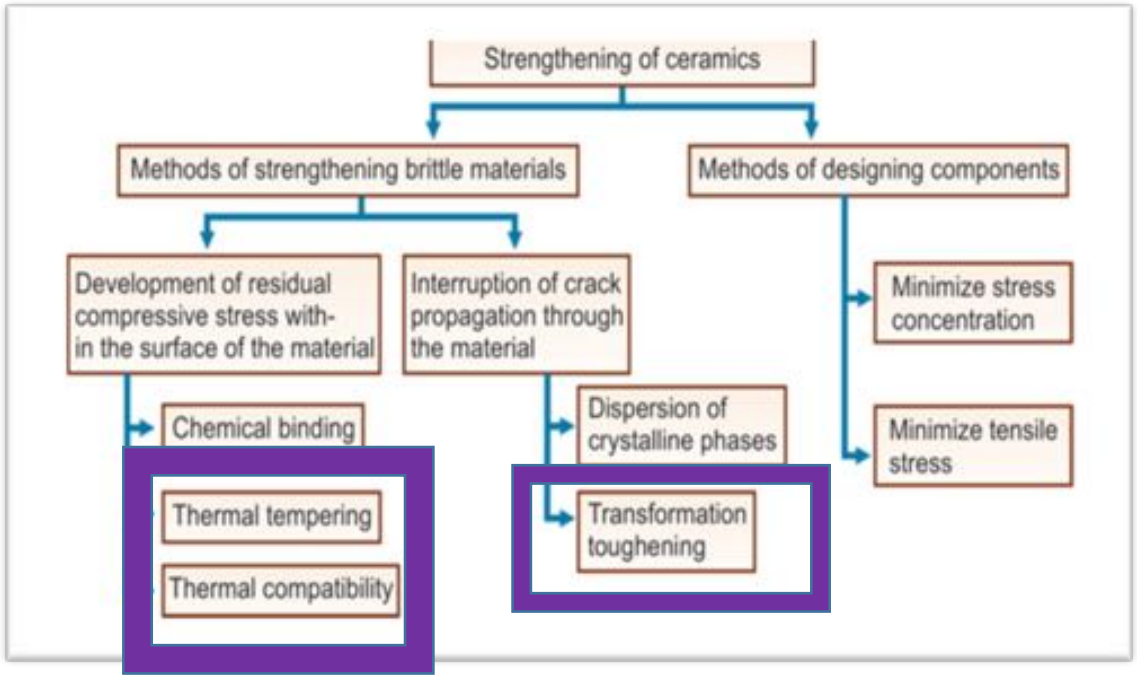
What to do about ceramic fracture liability ?



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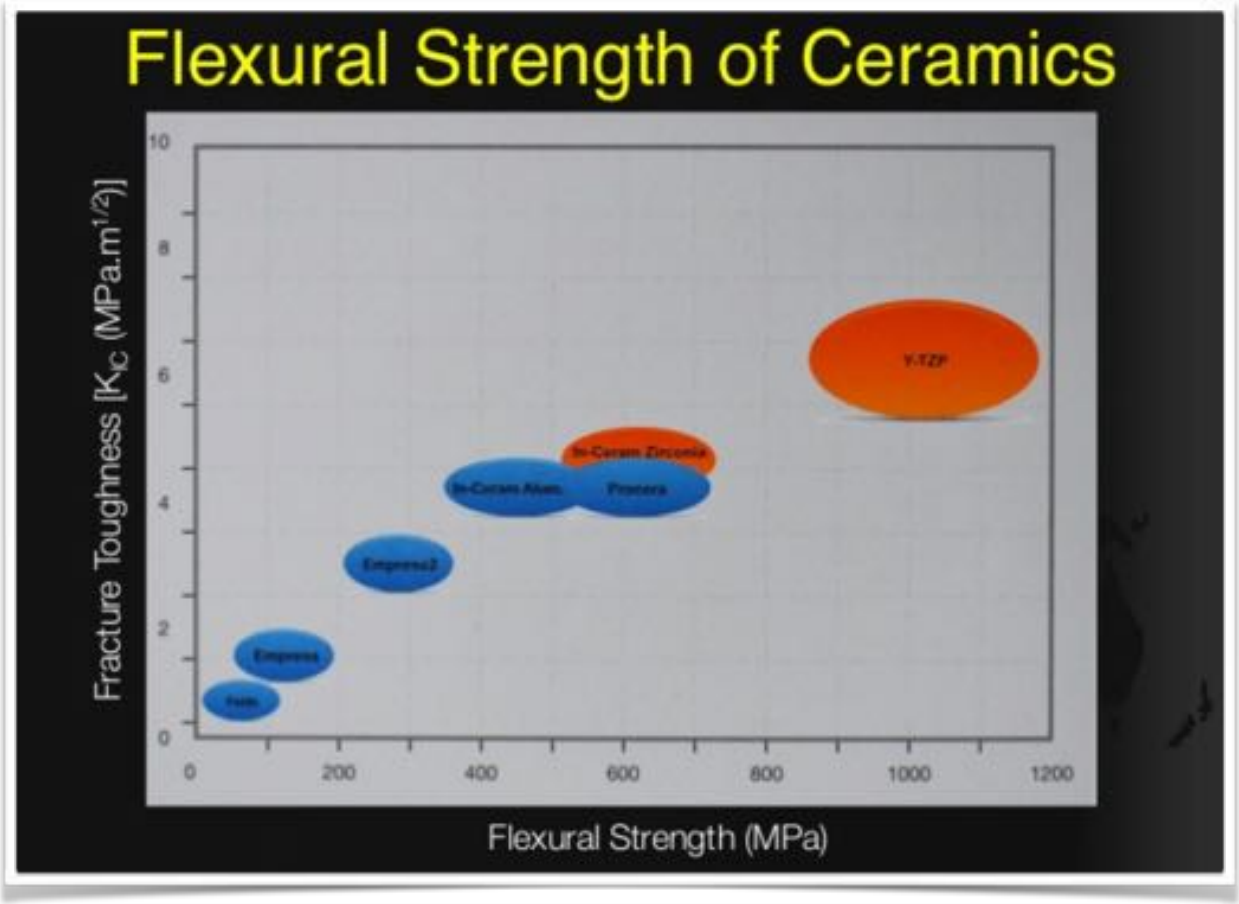
Flexural strength



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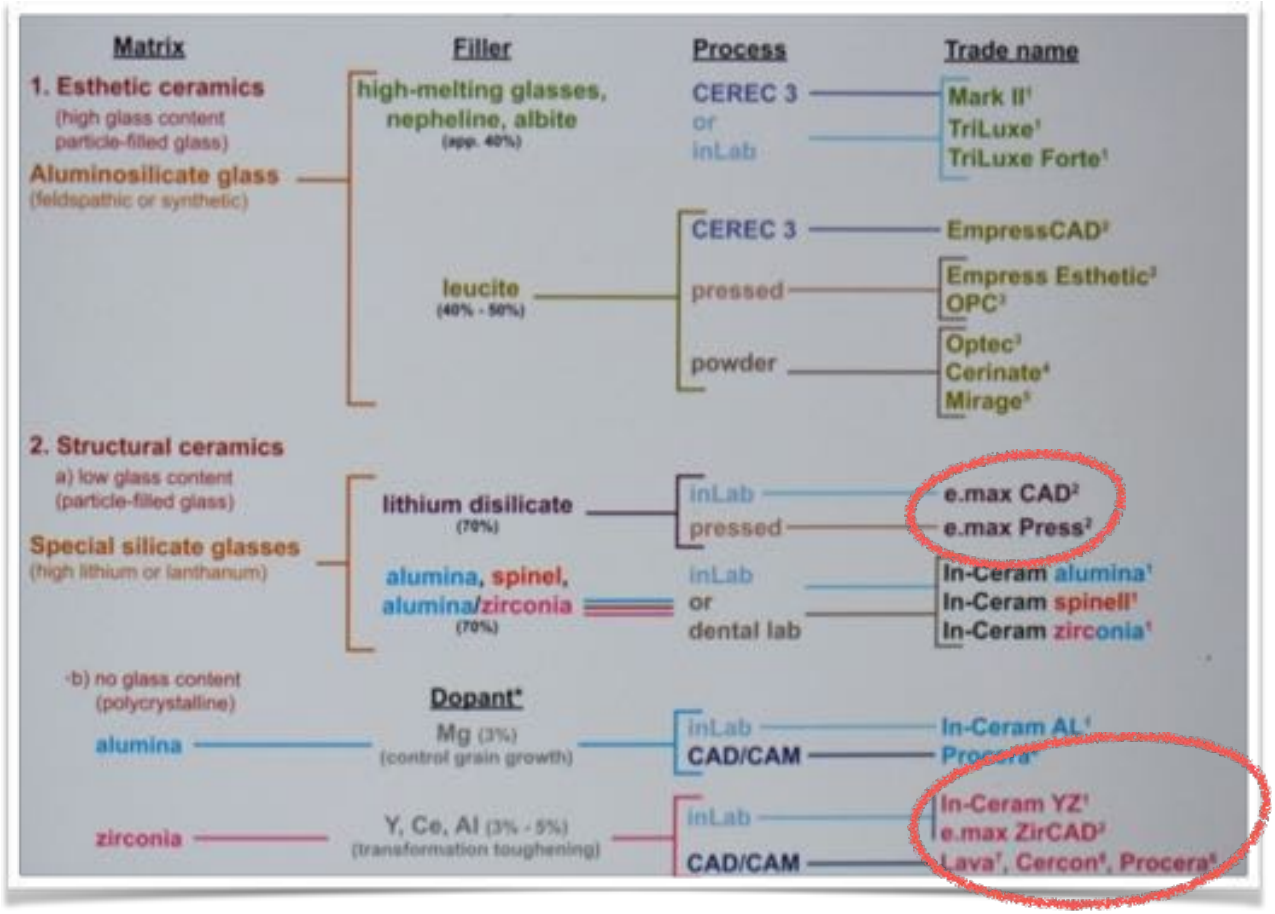
Industrial ceramics



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Summary of Ceramics Recommendations Based on Peer Review Literature

Material Type	Brand Name	Anterior Veneers	Anterior Crowns	Posterior Crowns	Anterior Bridges	Posterior Bridges
Feldspathic Glass	Vita Mark II blocks	Yes	Yes	No	No	No
Leucite Reinforced	Empress I IPS Empress Esthetic IPS Empress CAD	Yes	Yes	No	No	No
Lithium Disilicate	Empress II E-Max Press E-Max CAD	Yes	Yes	Yes	No	No
Aluminium Oxide	Vita Inceram Vita Inceram Zirconia Vita Al Procera	No (Aesthetics not suitable)	Yes	Yes	Yes	No
YZr	Procera Lava Zeno Everest Vita YZ Ivoclar YZ	No (Aesthetics not suitable)	Yes	Yes	Yes	Yes

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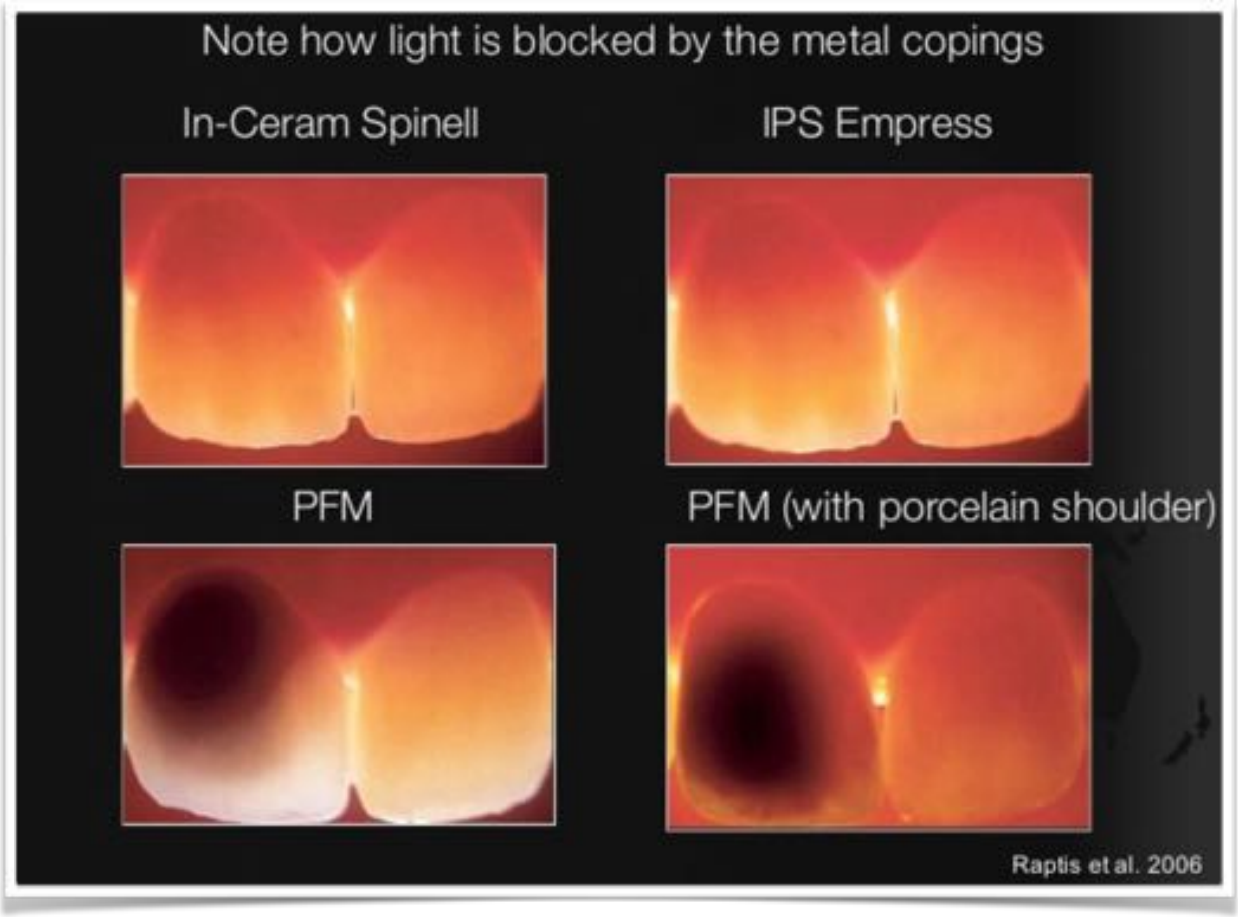

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Replacement of missing teeth – artificial tooth roots

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Meaningfulness ????

Implants will always be foreign bodies !

Respect human integrity with professional dignity

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Zirconiumdioxide Implants

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Dr.med.Dr.med.dent. Josef Vizkelety

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To summarize…..

- **Success rate Zirconiumdioxidie implants ≈ 86 % - 91 % < Titanium implants 94 % - 96 %**
- **Advantages aesthetic area compared to titanium implants**
- **heterogenous long term studies about two piece ceramic implant systems**
- **Range of indication two-piece > one-piece**
- **Rate of complication one piece ≠ two piece ?**
- **two piece: glued > screwed**
- **Challenges: implant fracture vs. abutment fracture, screw fracture ?**

What can we do to overcome the challenges ?

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- **Evidence based requirements for succesful ceramic implants (Zirconiumdioxide)**

„Strength“

„Prosthetics“

„Design“

„Internal thread“

„Surface“

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„Soft tissue/Hard tissue“

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The 4 pillars of „Integrative Biological Medicine“

Body, Mind and Soul in Conformity with the Creation

Say YES to LIFE, Find the inner Sources of Energy, Bring the Family in Harmony, change Thinking Patterns, use the Power of own Trust and Believe Concept, synchronization of body. Mind and soul, develop an environmental Awareness for future Generations

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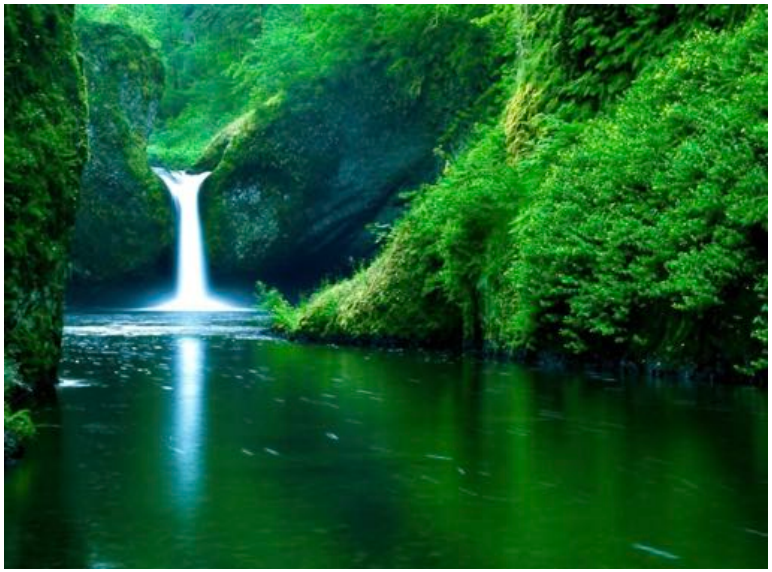
Harmonize your soul with nature

Balance



Refresh your body, mind and soul/spirit

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Relax and let loose…

Let go of your concerns, gain clarity in your thoughts and find inner harmony

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Be capable of leeting loose of “legal concerns“…….

Let loose of “internal waste " and past histories

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The special Role of Family

Authenticity and self-Love - an intact family provides support and love.

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Systemic family therapy - constellation

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Harmony of body, mind and soul

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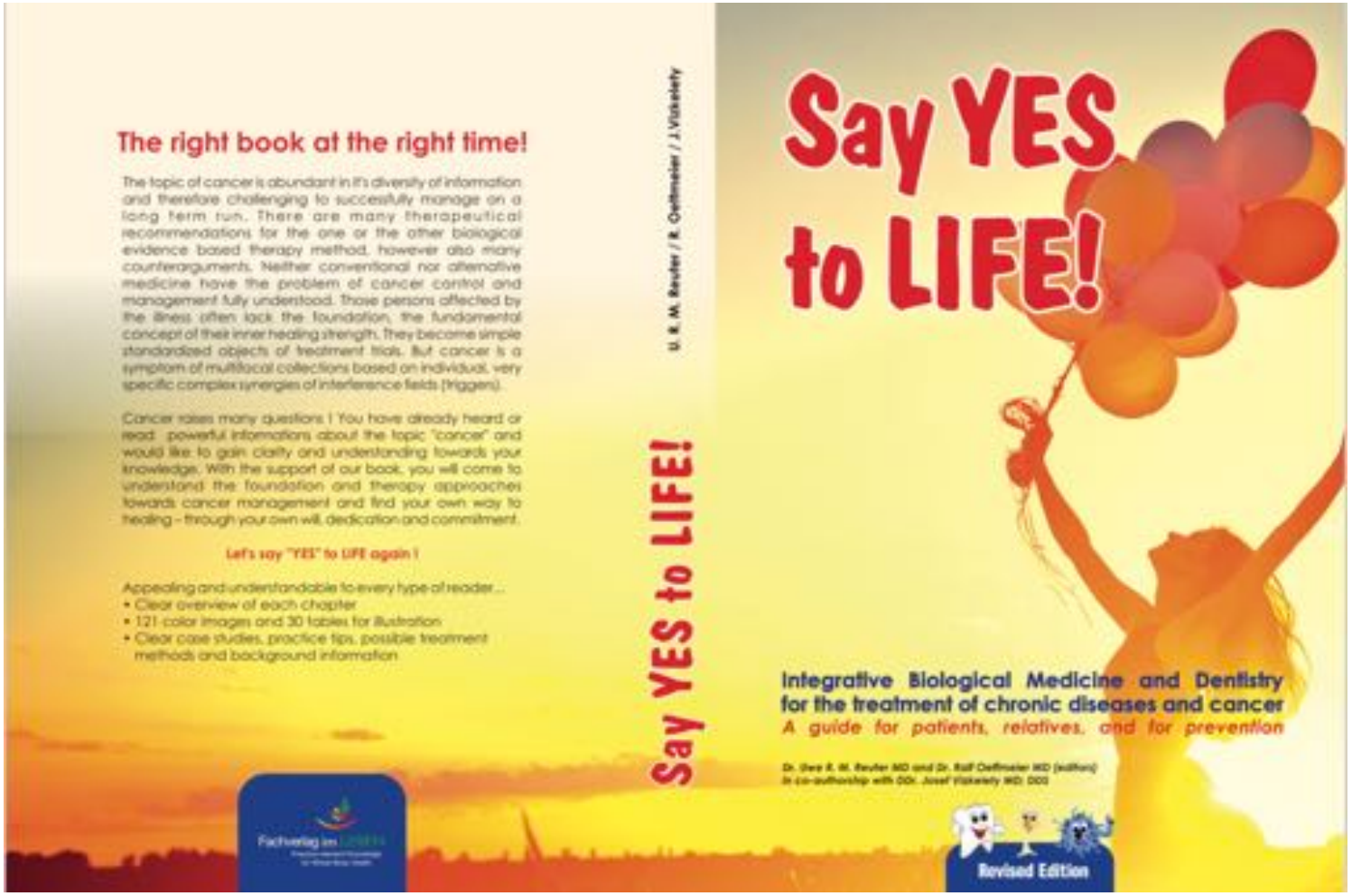

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