



MAKING THE WORLD A HEALTHIER PLACE

HEALTH RISKS ASSOCIATED WITH ROOT CANAL TREATED TEETH

Scientific bases

About 8 million root canal treatments are performed in Germany every year.

Both chronic inflammatory diseases and so-called autoimmune diseases have been increasing rapidly in all industrialized nations for decades. The cause is often unclear. Holistically thinking dentists and doctors see significant improvements in these diseases if root canal treated teeth and other interfering fields in the oral cavity are consistently removed and the immune system is strengthened. Where does this connection come from? The answer is simple: pathogenic bacteria and highly toxic degrading products.

How are teeth involved in the development of chronic diseases?

Root canal treated teeth are dead teeth. Even the best micro-endodontics will hardly ever be able to realize a completely bacteria-free root. Accessory side canals and the Endo-Paro connection via the dentinal tubules remain. The dead tooth, which was once an organ with its own nerve and blood supply, remains as a dead pillar in the oral cavity. The cause, a partly unknown species of anaerobic, pathogenic bacteria, which colonizes the remaining organic tissue, decomposes and secretes harmful metabolic products (toxins).

Toxins

These pathogenetic bacteria are produced from the amino acids cysteine and methionine as by-products of the anaerobic metabolism, highly toxic and potentially carcinogenic hydrogen sulfide compounds (thioether / mercaptan). These toxins can cause irreversible damage to the production of many of the body's vital enzymes and organs. The inhibition of important enzymes in the respiratory chain of mitochondria was demonstrated in vitro. During the chewing process these bacteria and especially their toxins are released into the lymphatic system of the surrounding tissue. From here they enter the bloodstream (focal infection) and the entire body.

Which bacteria lurk in dead teeth?

In a study by Siqueira et al., microorganisms were detectable in all endodontically treated teeth with apical inflammation, suggesting the suspicion of chronic infection. Richardson et al. detected 75 different strains of bacteria in root canal treated teeth with apical ostitis. Particularly common in and around dead teeth are enterococcus faecalis, capnocytophaga ochracea, fusobacterium nucleatum, leptotrichia buccalis, gemella morbillorum and porphyromonas gingivalis. Four of these named species infest the heart, three the nervous system, two the kidneys and brain, one the maxillary sinus. If an inflammation of the root tip is visible on the X-ray, the failure rate of a root canal treatment is significantly increased due to the chronic infection.

Immune response

The vital, healthy pulp and immune system play a decisive role in the defense against these germs. Frequently, the chronic infection caused by colonization develops into a chronic inflammation of the surrounding bone and the immune system is permanently activated. The macrophages activated in the course of the non-specific immune reaction release so-called inflammation mediators such as TNF-alpha, IL-1, growth factors, prostaglandins (PGE2) and leukotrienes, which circulate in the bloodstream.

These inflammatory mediators promote the development or worsening of chronic inflammation and autoimmune diseases. In addition, T-lymphocytes are stimulated, which in turn produce TNF-beta, which is also suspected to promote chronic inflammation and cancer. TNF-beta has been shown to increase the risk of postmenopausal breast cancer. T. Rau from the Paracelsus Clinic was able to prove a clear correlation between breast cancer and teeth. He found root canal treated teeth on 96% of breast cancer patients, compared to 35% in healthy patients.

Diagnostic

What are interference fields?

The concept of the „interference field“ in the human system is based on the assumption that an inflammatory process at one location in the body can cause a reaction at another location or lead to resistance to therapy (chronification). The classical interference field detection is carried out by the dentist by evaluating x-ray images / clinical findings and assigning them to medical findings of the respective treating specialty.

Interference Field Diagnostics

The teeth are one of the most important subsystems within a network of self-regulating sub-areas of the organism. Teeth and their associated periodontal apparatus (odonton) have a relationship to other physical structures and organs. Reinhold Voll coined the term „Odonton“ and identified direct and close interrelations between individual odontons and the different areas of the body. Interactions may have both positive as well as negative influences in the sense of a remote areas: a disturbed organ can have a pathological effect on the associated odonton and, conversely, a diseased tooth or its periodontal apparatus can disrupt the organ correlating with it (see page 7: Meridian system).



Therapy

Extraction

Many root canal treated teeth show some kind of inflammation of the surrounding tissue. This can be seen particularly well on the DVT (three-dimensional X-ray image). The cyst at the tip of the root is nothing more than a kind of capsule that the immune system itself forms around this infected area to shield it from the rest of the organism. Especially poisonous teeth often ankylose with the surrounding bone. The metabolism on site is shut down - like in a kind of prison, the body builds a wall around the tooth.

The only way to avoid this chronic toxifying is to surgically remove the dead teeth. The surrounding inflamed or cystic tissue must be completely removed. Soft bone should be removed without residue. This is followed by disinfection of the tissue with ozone. Implant placement adjacent to still existing root canal treated teeth should be carefully evaluated to avoid possible failure due to focal infection, according to the authors Brisman et. al.

Zirconia ceramic implants

Ceramic implants made of zirconium oxide from SDS Swiss Dental Solutions offer an aesthetic and immunologically perfect solution. Zirconium oxide is an electrically neutral biocompatible ceramic without any interference field characteristics. In contrast to grey titanium, it is metal-free and highly aesthetic due to its white color. Zirconium oxide implants combine the best biocompatibility with perfect aesthetics.

Perfectly suited for immediate implant placement

Ceramic implants from SDS Swiss Dental Solutions are designed so that teeth can be extracted and ceramic implants placed within one session.

Biological dentistry

Biological dentistry is a dentistry which considers the organism „human“ „bio-logically“. We recognize that the chewing organ is very closely connected to the entire body and is located in the direct vicinity of eminently important organs. After all, almost all the sensory organs are arranged around the chewing organ and the brain is in close proximity. The importance of the masticatory system is also shown by the fact that the fifth brain nerve (trigeminal nerve), which controls the chewing system is the largest cranial nerve. It occupies 50% of the space of all cranial nerves.

A further aspect is the cross-linking of the masticatory system with the entire organism through the system of the meridians. These do not only run through the dental system, but are constantly activated by the approximately 15,000 tooth contacts daily. Toothlessness therefore leads to atrophy of the associated meridian, which can only be partially compensated by acupuncture or reflexology. This is why it is so extremely important that gaps between teeth are closed as quickly as possible with neutral ceramic implants so that the affected meridians are reactivated appropriately.

The situation of the temporomandibular joint also plays a major role. Both the statics of the spine and the blood flow to the brain and its venous outflow depend on it. A loss of bite height compresses the region of the large brain-supplying vessels in the neck. This restricts the blood flow to the brain. A loss of bite height of 1 mm reduces the blood flow to the brain by about 50%! A connection between loss of bite height and neurodegenerative diseases such as dementia and cognitive disorders has also been recognized. Additionally toxins and waste products can only be drained from the brain via a sufficiently wide jugular vein. This is all the more important because the brain does not have a lymphatic system, but rather the removal is carried out by the so-called „glymphatic system“. At night, the brain cells shrink by up to 60% and thus generate a cavity between the cells through which these toxins can drain off. A prerequisite for the functioning of this system, however, is that all sources of stress are turned off at night. This includes all EMF sources such as mobile phones, WLAN etc.

Apart from the oral system, there is no other organ or region of the body in our organism that is interspersed to such an extent with heavy metals, alloys, toxic materials, dead body organs and inflammations. For example, dentistry is the only medical discipline that tolerates leaving a dead organ in the body.

Another fatal disruptive factor of modern times is that the gums belong to the ectoderm (outside of the body), but the bone belongs to the mesoderm (inside of the body). If we eat something poisonous, then this is in the oral cavity, stomach and intestines still outside the ectoderm, i.e. on the outside of the body. Only when it has been absorbed is it located in the mesoderm or endoderm. If the bond between gums (ectoderm) and bone (mesoderm) is destroyed, as in the case of periodontitis, then pathogens and toxins can enter the body directly like a Trojan horse.

This is a shock to the immune system and the reason why gum disease maximizes the risk of heart disease. The ceramic implant has the outstanding property that the gums grow to the ceramic and thus firmly close the „immunological door“ again. In contrast to this, the gums never grow on titanium, which means that the immunological door is open for life through a titanium implant.

In summary of the factors mentioned, it is understandable why experts assume the involvement of disruptive factors in the dental field in over 60% of all chronic diseases. At the center of this knowledge of the connections between disorders in the masticatory system and the rest of the organism is „focal infection“. This means that there is a focus at one point of the organism, which causes a reaction or disturbance at a completely different point.

This term was coined by the most famous dentist of all time, Dr. Weston Price, who was President of Research and Education of the ADA American Dental Association for over 30 years and who had long been aware of the need to rehabilitate this focus. His work has been and continues to be supported by biological dentists and doctors such as Thomas Levy, Johann Lechner, Boyd Haley, Ulrich Volz, Dietrich Klinghardt, Joachim Mutter and many others.

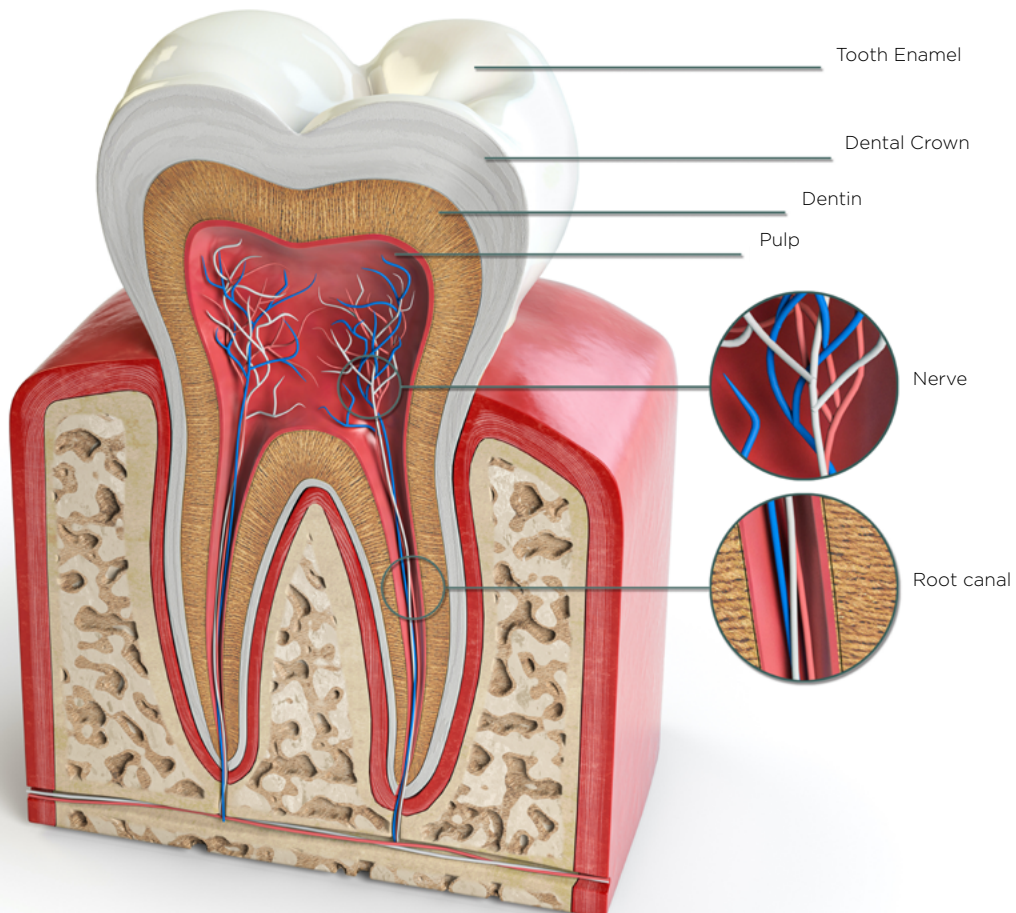
All in one

The dilemma so far, however, has been that at the end of the „necessary clean-up work“ there is often a „field of devastation“ left behind, where gaps then have to be further treated with prostheses and bone augmentation. Patients were often unable to socialize for weeks, suffered intense pain and massive swelling, and in some cases spent years trying to regain a halfway anatomical and aesthetically pleasing condition.

This was the handicap of holistic dentistry in the past: patients understood the need for radical therapy to recover, but could not be optimally treated with the available solutions.

The approach of biological dentistry provides a solution to this shortcoming. One needs to comprehensively recognize the logical relationships presented and incorporate them to develop and execute a treatment concept that is both simple and highly efficient. In the first step, all non-biological or non neutral materials are removed under maximum protective measures, as well as all dead organ parts and inflammations. In this process the immune system is activa-

ted and by the use of oral supplements . The second step is the preservation and reconstruction of the masticatory system using metal-free and neutral materials, always with the aim of preserving or restoring the anatomy, bone, soft tissue and thus the aesthetics.



Ceramic implants for highest demands

Implants have long been established as the most attractive type of dental prosthesis. They offer security and look good. They provide more self-confidence and an improved quality of life. Implants replace lost teeth so well that they usually last longer than your own teeth. Whether only a single tooth is replaced or a fixed set of teeth is restored with several implants - the material should remain stable, neutral and compatible for decades. The high-performance ceramic zirconium oxide, which has long been used in orthopedics for artificial hip joints, meets these requirements like no other material. Zirconium oxide ceramic is a white, metal-free, immunologically neutral and biocompatible material with many advantages over metal. Whether a titanium incompatibility or a general discomfort with metals in our body suggests a metal-free solution - the highly aesthetic white ceramic implants made of the biocompatible high-performance material zirconium oxide are always an excellent choice and are classified as equivalent to titanium implants according to current studies.

Beautiful white teeth and pink gums are an expression of health, energy, zest for life and self-confidence. The ceramic implants from SDS Swiss Dental Solutions are white through and through, come very close to the natural tooth color and can help to maintain or restore a radiant smile. In contrast to implants made of titanium, disturbing grey edges at the gum line or a grey shimmering through are avoided. Even if the covering gum is extremely thin or recedes, the implant remains completely white. This is one of the reasons why ceramic implants are ideal for use in the anterior region. While the use of metals in the oral cavity can have a negative impact on the entire organism, ceramic implants are excellently tolerated because they are completely metal-free and 100% biocompatible.

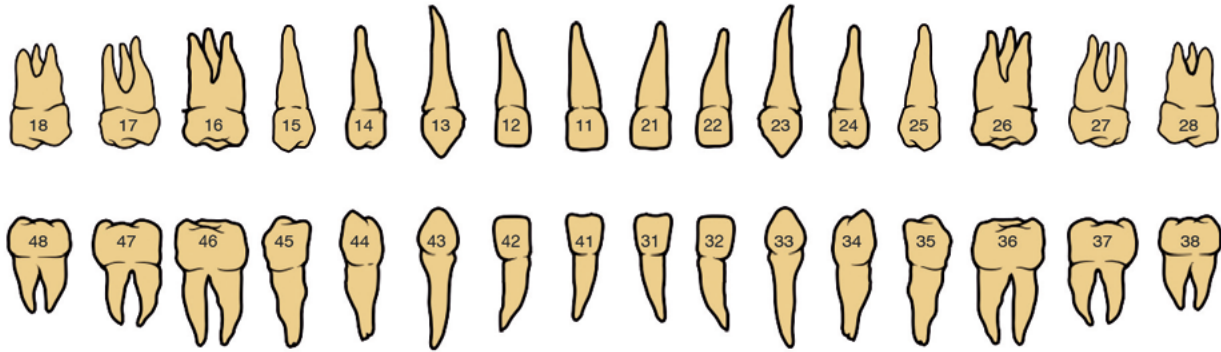
Thanks to the optimal tissue compatibility, the gum regeneration around the implant proceeds very well and the zirconium dioxide can even bond with the gum. Because ceramics are completely new and effective structures the formation of bacteria and plaque and thus the risk of gum inflammation is significantly reduced - the risk of inflammation is even lower than with your natural teeth. The patented SDS surface structures together with the thread forms adapted to the bone allow the implants to heal excellently and to be loaded after only a few weeks. Implants from SDS

Swiss Dental Solutions are available for all indications. This enables the dentist always to select the perfect implant. In addition, he can do without metal completely when placing the implants. As SDS instruments are also made of the same high-tech ceramic as the implants and crowns. This also means that no traces of metal are left in the bone.

Founded by the ceramic pioneer and implantologist Dr. Ulrich Volz, SDS Swiss Dental Solutions is regarded today, as the innovation leader in the field of ceramic implants. The Swiss company at Lake Constance stands for unique ceramic competence, many years of expertise and outstanding treatment successes. A key success factor is the development „from the practice, for the practice“. SDS Swiss Dental Solutions places the highest demands on its products. They are certified according to current standards, bear the CE mark and have been approved by the FDA (Federal Drug Administration) in the USA since 2019. Since the introduction of high performance zirconium dioxide implants by Dr. Ulrich Volz, biological dentistry has been revolutionized. For the first time we are able to offer patients a biological solution to the increasing problems related to the number of root canal treated teeth. The material zirconium dioxide is 100% metal-free. It is harder than steel and can only be processed with diamonds. The material can only be etched with hydrofluoric acid and has a melting point of over 2,680 °C. As a „finally reacted material“, zirconium dioxide has no free electrons on its surface, is therefore absolutely neutral, cannot form any bonds and is without any interference field characteristics. Zirconium dioxide implants combine best biocompatibility with perfect aesthetics.

Meridian system for self analysis

| | | | | | | | | | | | | |
|----------------------|------------------------------------|---------------------|------------------------------------|-----------------|------------------------------------|------------------------------------|--------------------|------------------------------------|-----------------|------------------------------------|--------------------------|---------------------|
| SENSORY ORGANS | inner ear | tongue/taste | nose/olfactory sense | eye | nose/olfactory sense/frontal sinus | nose/olfactory sense/frontal sinus | eye | nose/olfactory sense | tongue/taste | inner ear | | |
| JOINTS | shoulder elbow | jaw | shoulder elbow | rear knee | | rear knee | | shoulder elbow | jaw | shoulder elbow | | |
| | hand ulnar foot plantar toes | | | hip | sacrum-coccyx | sacrum-coccyx | hip | | | | hand radial foot big toe | anterior knee |
| SPINAL CORD SEGMENTS | Th 1 C8 Th 7 Th 6 Th 5 S 3 S 2 S 1 | Th 12 Th 11 L 1 | C 7 C 6 C 5 Th 4 Th 3 Th 2 L 5 L 4 | Th 8 Th 9 Th 10 | L 3 L 2 S 4 S 5 Co | L 3 L 2 S 4 S 5 Co | Th 8 Th 9 Th 10 | C 7 C 6 C 5 Th 4 Th 3 Th 2 L 5 L 4 | Th 12 Th 11 L 1 | Th 1 C8 Th 7 Th 6 Th 5 S 3 S 2 S 1 | | |
| VERTEBRAE | B 1 C 7 B 6 B 5 S 2 S 1 | B 12 B 11 L 1 | C 7 C 6 C 5 B 4 B 3 L 5 L 4 | B 9 B 10 | L 3 L 2 Co S 5 S 4 S 3 | L 3 L 2 Co S 5 S 4 S 3 | B 9 B 10 | C 7 C 6 C 5 B 4 B 3 L 5 L 4 | B 12 B 11 L 1 | B 1 C 7 B 6 B 5 S 2 S 1 | | |
| ORGANS | right heart | pancreas | lung | right liver | right kidney | left kidney | left liver | lung | spleen | left heart | | |
| YIN | 11-13 h | 9-11 h | 3-5 h | 1-3 h | 17-19 h | 17-19 h | 1-3 h | 3-5 h | 9-11 h | 11-13 h | | |
| | duodenum allergies | right stomach | colon | gall-bladder | right bladder urogenital region | left bladder urogenital region | left bile ducts | colon | left stomach | jejunum ileum allergies | | |
| YANG | 13-15 h | 7-9 h | 5-7 h | 23-1 h | 15-17 h | 15-17 h | 23-1 h | 5-7 h | 7-9 h | 13-15 h | | |
| ENDOCRINE GLANDS | anterior pituitary | parathyroid | thyroid | thymus | posterior pituitary | epiphysis | epiphysis | posterior pituitary | thymus | thyroid | parathyroid | posterior pituitary |
| OTHER | CNS psyche | right mammary gland | | | | back pain headache | back pain headache | | | left mammary gland | | CNS psyche |



| | | | | | | | | | | | | |
|----------------------------------|------------------------------------|--------------------------------------|--|-------------------|------------------------------------|------------------------------------|------------------|--|--------------------------------------|------------------------------------|----------------|-------------------|
| OTHER | energy balance | | right mammary gland | | | | | left mammary gland | | | energy balance | |
| ENDOCRINE GLANDS VASCULAR SYSTEM | peripheral nerves | arteries | veins | lymphatic vessels | gonads | adrenal gland | adrenal gland | gonads | lymphatic vessels | veins | arteries | peripheral nerves |
| YANG | 11-13 h | 3-5 h | 9-11 h | 1-3 h | 17-19 h | 17-19 h | 1-3 h | 9-11 h | 3-5 h | 11-13 h | | |
| YIN | 13-15 h | 5-7 h | 7-9 h | 23-1 h | 15-17 h | 15-17 h | 23-1 h | 7-9 h | 5-7 h | 13-15 h | | |
| | right heart cardiovascular system | right lung | pancreas | right liver | right kidney | left kidney | left liver | spleen | left lung | left heart cardiovascular system | | |
| ORGANS | right ileum allergies | right colon ileosacral area | right stomach pylorus | gall-bladder | right bladder urogenital area | left bladder urogenital area | left bile ducts | left stomach | left colon | jejunum ileum allergies | | |
| VERTEBRAE | C 7 B 1 B 5 B 6 S 1 S 2 hip | C 7 C 6 C 5 B 4 B 3 L 5 L 4 | B 12 B 11 L 1 | B 9 B 10 | L 3 L 2 Co S 5 S 4 S 3 | L 3 L 2 Co S 5 S 4 S 3 | B 9 B 10 | B 12 B 11 L 1 | C 7 C 6 C 5 B 4 B 3 L 5 L 4 | C 7 B 1 B 5 B 6 S 1 S 2 hip | | |
| SPINAL CORD SEGMENTS | Th 1 C8 Th 7 Th 6 Th 5 S 3 S 2 S 1 | C 7 C 6 C 5 Th 4 Th 3 Th 2 L 5 L 4 | Th 12 Th 11 L 1 | Th 8 Th 9 Th 10 | L 3 L 2 Co S 5 S 4 | L 3 L 2 Co S 5 S 4 | Th 8 Th 9 Th 10 | Th 12 Th 11 L 1 | C 7 C 6 C 5 Th 4 Th 3 Th 2 L 5 L 4 | Th 1 C8 Th 7 Th 6 Th 5 S 3 S 2 S 1 | | |
| JOINTS | shoulder - elbow | | anterior knee | posterior knee | | posterior knee | | anterior knee | shoulder - elbow | | | |
| | hand ulnar foot plantar toes | hand radial foot big toe | | hip | sacrum-coccyx foot | sacrum-coccyx foot | hip | | hand radial foot big toe | hand ulnar foot plantar toes | | |
| SENSORY ORGANS | ear/retina | ethmoidal cells/nose/olfactory sense | sinus maxillaris/tongue/sense of taste | eye/visual sense | frontal sinus/nose/olfactory sense | frontal sinus/nose/olfactory sense | eye/visual sense | sinus maxillaris/tongue/sense of taste | ethmoidal cells/nose/olfactory sense | ear/retina | | |

Dental correspondence after consideration of the references according to Bahr-Schmid, Voll-Kramer and the findings of TCM.

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SOLUTIONS

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