The Only Cause of Disease

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Overview

- The pathophysiology in all disease and accelerated aging
- The singular cause of that pathology
- The critical principles of redox biology
- The critical role of vitamin C in health and redox physiology
- The most important toxin (pro-oxidant) sources
- Preventing and resolving coronary disease and breast cancer
- Resolving pathogen impact on chronic disease

The Cause of All Disease: Pathophysiology

All diseases and all their associated symptoms are directly due to:

Increased

Intracellular Oxidized Biomolecules (IOB)

Redox Biology
Principles: Definitions

Toxin: (Pro-oxidant, free radical, reactive oxygen species [unstable molecule seeking electrons], venom, carcinogen, or simply POISON)

Takes, or causes to be taken, electrons away from reduced (normal) biomolecules (OXIDATION) and **never releasing them again**

The toxin then becomes chemically **stable** and **nonreactive**. It can also **accumulate** and physically inhibit normal metabolism as well.

Redox Biology
Principles: Definitions

Antioxidant: (antitoxin, nutrient molecule) Vitamin C is the prototypical and most important antioxidant.

Distributes electrons and restores them back to oxidized biomolecules (REDUCTION)

The essence of redox (reduction-oxidation) biology is really the essence of vitamin C-based biochemistry.

The many other antioxidant/nutrient biomolecules can also restore oxidized biomolecules to their reduced, functioning state. However, vitamin C has **unique properties** that make it the most important antioxidant.

The Cause of All Disease: Pathophysiology

Increased IOB is present when there exists:

- New and **ONGOING** toxin exposure, exceeding the capacity of the existing antioxidant capacity in the body to neutralize (reduce) them before they can oxidize biomolecules
- An excess presence of biomolecules that were **previously** oxidized by toxins
- A combination of antioxidant deficiency, ongoing toxin exposure, and accumulated oxidized biomolecules, especially intracellularly [16760481].

Redox Biology Principles

The redox nature of vitamin C and the pro-oxidant nature of all toxins concisely explains why vitamin C, along with many other antioxidants, has been **documented** to be an effective ***antitoxin*** against ***all*** toxins for which it has been tested, *in vitro* and *in vivo*, in plants, animals, and humans, and including clinical studies.

Properly administered vitamin C has never failed to neutralize an acute pro-oxidant/poison/toxin exposure or ingestion

Redox Biology Principles

All disease **IS** the state of excess oxidation in biomolecules, especially intracellularly.

It is NOT an ill-defined state of disease that "results" from the excess oxidation. In other words, "increased oxidative stress" does ***not cause*** a disease, but ***is the disease itself.***

Redox Biology Principles

Because all disease IS increased oxidative stress due to increased numbers of oxidized biomolecules, it then follows that the **only agents that cause biomolecule oxidation are the only agents that cause disease.**

What Causes Excess Oxidation?

Toxins are the only agents that cause excess biomolecule oxidation.

By definition, a toxin can never be toxic if it does not result in the excess oxidation of biomolecules.

If excess oxidation is present, excess toxicity is always present as well.

Redox Biology Principles

- A disease is ***only*** a unique array of oxidized biomolecules
- The ***only*** agents that result in biomolecule oxidation are toxins.
- Subsequently, **Toxins Cause All Disease**
- The only effective **disease-reversing (curative)** clinical protocols must result in <u>decreased</u> toxin presence and <u>increased</u> antioxidant presence.
- Traditional medicine primarily attempts to suppress symptoms while allowing disease progression. Good diagnosis, but very poor treatment

Redox Biology Principles

Biomolecules (nucleic acid, proteins, enzymes, sugars, fats, etc.) are **inactive** when oxidized, and **active when reduced**.

Furthermore, oxidized biomolecules only end up physically accumulating and then interfering with the necessary direct interactions of active biomolecules by taking up needed space in the cytoplasm.

Redox Medicine Principles

Therefore, the unique nature of any disease process depends ***solely*** on the combinations of the following properties:

- **Type** of biomolecule oxidized (fat, sugar, protein, enzyme, structural molecule, etc.)
- **Quantity** of a type of biomolecule that is oxidized
- **Location** of those oxidized biomolecules
- **Concentration** of those oxidized biomolecules
- **Length of time** in oxidized state (acute or chronic)

And it is the biochemical properties of the toxin(s) that determine which biomolecules get oxidized.

Important Toxin Biochemical Characteristics

- Solubility properties (fat, water, combination)
- Molecular size (physical access to cellular location)
- Ionic charge or electrically neutral
- Unique molecular structure (physical fit)
- How readily it oxidizes certain biomolecules (chemical compatibility)
- How readily it accumulates or gets excreted (water-soluble more readily excreted)

Redox Biology Principles

The PRIMARY property of a toxin is not just that it steals an electron from a biomolecule (oxidation), but that it **RETAINS** it and never surrenders it again, ***depleting the available electron pool in the cell that can be circulated throughout the body***.

Redox Biology Principles

This is the primary difference between an electron-filled toxin that has taken the electron(s) from a biomolecule and an electron-filled reduced antioxidant. ***The toxin forever keeps the electrons, while the reduced antioxidant easily releases the electrons, and later re-acquires it,*** keeping the electrons CIRCULATING among the biomolecules.

Vitamin C and other antioxidants are effectively electron CONDUITS that continually shuttle electrons among biomolecules without retaining them.

Redox Biology Principles

Optimal antioxidant impact directly promotes and increased ***electron distribution*** and ***flow*** throughout the cell.

This directly supports cellular MICROCURRENTS, which generate and support optimal transmembrane voltages.

Antioxidants **PROMOTE** cellular microcurrents

Toxins **INHIBIT** cellular microcurrents.

Redox Biology Principles

Contrary to what it commonly believed, the primary impact of an antioxidant such as reduced vitamin C to general health and healing is NOT to bring NEW electrons into the body. Rather, the bolstering of the overall vitamin C content in the body allows an optimal, ongoing **electron distribution and flow** of the **electrons already present** in the cells and tissues. It is the diet that serves to sustain or increase the available electron "pool" in the body.

Redox Biology Principles

In animal studies, vitamin C (ascorbic acid, AA) administered in its ***oxidized*** [electron-depleted] form (dehydroascorbic acid, DHAA) **readily minimized brain infarct size from induced ischemic stroke**. Furthermore, the DHAA promptly ended up INCREASING the quantities of reduced vitamin C metabolized in those brains [26968905, 16883179, 11573006, 19266157].

Redox Medicine Principles

Methylene blue, another antioxidant with striking clinical parallels to vitamin C in its effects, rapidly resolves advanced infections, **including advanced septic shock**, when given in either its oxidized or reduced forms [32435102, 21246318, 8977944, 34399199].

Of note as well is that methylene blue has resolved such cases of advanced septic shock as a **MONOTHERAPY** when all else has failed.

Redox Medicine Principles

In fact, most PubMed studies primarily describe the positive clinical impact of **reduced** vitamin C and of **oxidized** methylene blue, clearly indicating that the **electron distribution capability of a given antioxidant** is its most important characteristic, not whether it is electron-saturated at the time of administration.

Redox Medicine Principles

Remarkably, then, it is ***not necessary*** to administer various antioxidants in their reduced form to realize a positive clinical impact. MB is marketed only in its oxidized (blue) form. Coenzyme Q10 (ubiquinone or ubiquinol) is available in both states of oxidation. However, antioxidants are traditionally only marketed in their reduced forms, as the oxidized forms are considered to be depleted and even toxic (38928470, 37971634, 38255749)

Redox Medicine Principles

The ORAC (oxygen radical absorption capacity) test is promoted as an important measure of the "power" of an antioxidant [33806141, 21512895, 22448093]. However, many agents have higher "scores" than vitamin C or vitamin C-containing foods.

By ORAC testing astaxanthin is supposedly 6,000x more "powerful" than VC.

Yet, the literature is clear on the CLINICALLY SUPERIOR power of vitamin C in the human being.

Vitamin C: Unique Clinical Impact

- Small and present in all cells
- Uses the passive glucose transporters and the active specific vitamin C transporters to bring VC into the cells
- VC also has a minimal capacity not available to much larger molecules to diffuse directly into cells
- Has easy access to all intracellular compartments
- Can move TWO electrons per molecule rather than one
- Has a stable one electron-depleted intermediate state (ascorbyl radical) allowing it to be optimally responsive to the immediate reduction or oxidation needs of its microenvironment [6280338, 36234722]
- Deficiency fuels all disease; severe deficiency causes death (scurvy)

Redox Biology:
Basic Laws

- Electrons are the fuel of life. The "combustion" of this fuel is nothing more than the flow (exchange) of electrons between and among biomolecules
- Increased oxidative stress results in cellular electron depletion and inhibition of optimal electron flow (current)
- All clinical toxicity results from the loss of metabolic function in oxidized biomolecules.
- Increased oxidative stress **IS** all disease.

Primary Toxin Sources

- Coming from pathogen metabolism and pathogen death
- From accumulated toxin stores, most significantly of heavy metals
- From the presence of **persistent spike protein**, the main toxin in long COVID, sometimes following incomplete recovery from COVID, but ***most commonly*** from one or more COVID mRNA, spike protein-producing, injections

Promoters of All Chronic Disease (Toxin Sources)

- Infections (endotoxins, exotoxins, aerobic and anaerobic metabolic byproducts, **dental**); documented to strongly promote oxidative stress and lessen antioxidant capacity

- **Chronic pathogen colonization** in/on the mucosa of the naso- and oropharynx and upper respiratory tract with resultant abnormal gut microbiome (toxins and pathogens swallowed 24/7); also colonization **IN** all chronically diseased tissues or organs

Promoters of All Chronic Disease (Toxin Sources)

- Known exogenous (external) toxin exposures (environmental, pesticides, **HEAVY METALS**, etc.)
- Toxic iron status (most people in "normal" range are toxic)
- Toxic copper status
- Toxic calcium status (the rule in nearly all American adults)

Promoters of All Chronic Disease (Toxin Sources)

- Dietary/digestive toxin exposures (constipated gut, *Clostridium*); inadequate/poor nutrition and/or poor digestion; **poor digestion is worse than poor quality nutrition in terms of overall toxic impact**; organic foods still very important for micronutrient content; leaky gut from abnormal microbiome; proper food combining of critical importance
- Low sex hormone levels; low thyroid function, especially intracellularly; low cortisol levels

Treatment Principles for All Chronic Diseases

- **Prevent/minimize** new daily toxin exposure (environmental, dental, dietary, digestive)
- **Neutralize** toxins already present in the body
- **Excrete** toxin stores in a non-toxic, or minimally toxic, manner (detoxification always causes some re-toxification)
- ****Resolve** infections and chronic pathogen colonizations, and eliminate the reasons for contracting new infections**
- **Supplement optimally** to maximize the antioxidant/nutrient status of the body as completely as possible
- **Address hormone deficiencies**, especially, and most commonly, of testosterone, estrogen, thyroid hormone, and cortisol

Primary Sources of Oral Pathogen-Related Toxins

- Root canal-treated teeth
- Other chronically abscessed but pain-free teeth (chronic apical periodontitis)
- **Chronic pathogen colonization** in naso- and oropharynx
- Chronic periodontal (gum) infection/inflammation
- Cavitational gangrene (old extraction sites and around root tips of chronically infected teeth)
- Chronically infected tonsils (from draining chronically infected teeth and/or gums) and their **inability to heal themselves**
- Infected dental implants

The Root Canal-Treated Tooth

Over 5,000 consecutive extracted root canal-treated teeth were examined and analyzed. ***100%*** had pathogens and highly potent pathogen-related toxins. If there does exist a non-toxic root canal-treated tooth, it remains to be found and reported. Of note, “normal” teeth extracted for orthodontic purposes and analyzed showed no toxins or pathogens.

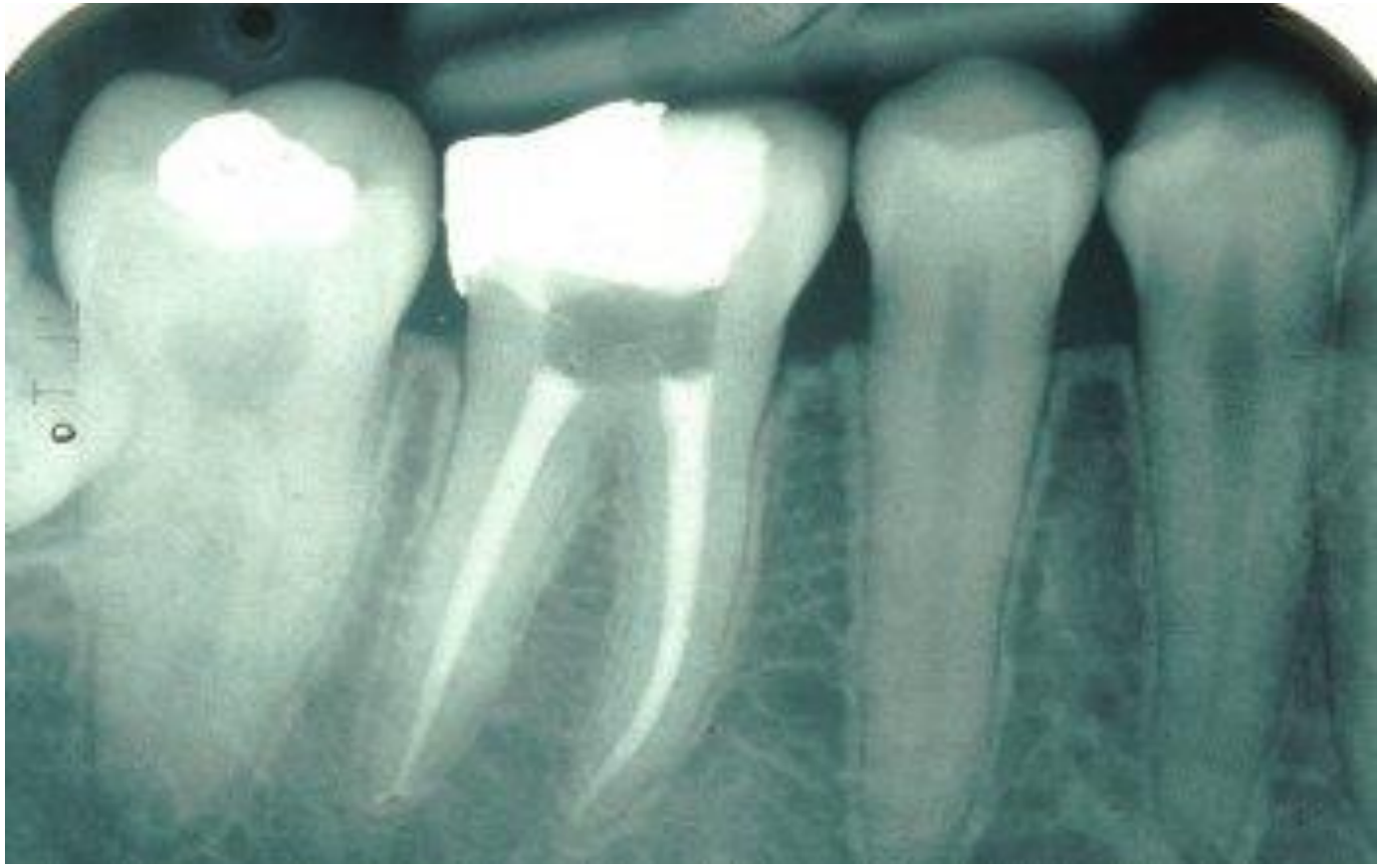
The Root Canal-Treated Tooth

All root canal-treated teeth continually produce endogenous toxins as the pathogens proliferate at the root tips. Root canals that have been found to have **fungi, viruses, and over 460 different types of bacteria**. [19828883] Any combination from this array of microbes and pathogens, however, represents what can be found in all root canal-treated teeth.

Root Canal-
Treated Tooth

- For the molars and larger teeth, a ***perfect endogenous delivery system*** of pathogens and toxins into the venous blood and lymphatic drainage
- From the draining veins, first high-pressure blood vessels to receive the pathogens/toxins: **coronary arteries** (and then the cerebral arteries)
- From the draining lymphatics, a pooling of the pathogens/toxins in the lymphatics of the breast(s)

The Root Canal-
Treated Tooth



Chronic Apical Periodontitis (CAP)

CAP refers to teeth with **pain-free abscesses** at the root tips. These teeth are always **AT LEAST** as toxic as root-canaled treated teeth and often more so.

The radiolucencies (dark spaces, typically rounded, on X-ray) of CAP ***always*** indicate the presence of a chronic abscess and a necrotic (dead) tooth pulp.

Inflammation and Coronary Artery Disease

Inflammation is now accepted as the ***primary*** cause for initiating and evolving atherosclerosis.

[23357128]

Furthermore, atherosclerosis is now considered a ***chronic*** inflammatory disease [23430000]

But What Causes the Chronic Inflammation?

Inflammation requires a pro-oxidant (toxin) presence; for coronary artery disease, this is the seeding of pathogens and associated toxins from **oral infectious sources** into the coronary arterial lining (endothelium). When the seeding does not stop, the immune inflammatory response becomes chronic, and it ***becomes the disease it was designed to prevent***.

Bad Luck or Wrong Dentist?

The overwhelming conclusion to be reached here is that having a heart attack, especially if you are "doing everything right" is ***not*** bad luck. **And it's not because of a "bad family history."** And, truth be known, ***most cardiologists, internists, and family practice doctors think that this is precisely the case***.

Always check the oral status of a heart patient, since it is not only the **CAUSE** of heart attacks nearly all the time, but also the most easily remedied of causes, and addressing this will simultaneously lower the other established cardiac risk factors at the same time.

But What Causes the Chronic Inflammation?

Chronic pathogen colonizations in the coronary arterial wall, along with their associated toxins and high reactive (Fe3+) iron content, now appear to be the **entire reason** for the chronic inflammation (or, **chronically increased oxidative stress**) seen at all stages of atherosclerosis [22556042]

But What Causes the Chronic Inflammation?

<u>100%</u> (38 of 38) plaque specimens removed by atherectomy ("roto-rooter") in catheterized coronary artery disease patients had a broad variety (>50 different species) of pathogen signatures, many of ***oral origin*** (normal—NO pathogens ever present) [16490835]

Infected Tooth Pathogens

Root Canals and Heart Attacks:

Furthermore, the DNA of oral pathogens ***typical*** for root canal and gum infection flora, not just "bacteria in general" has been consistently been identified in **coronary atherosclerotic plaque** [11063387;16277580; 20657096]

Infected Tooth Pathogens

Root Canals and Heart Attacks:

DNA of pathogens typical for periodontal infection and endodontic (root canal) origin were present in the blood clots aspirated from patients with acute myocardial infarction. [23418311]

101 patients: endodontic (root canal-treated tooth) origin—78%; periodontal origin—35%

Total amount of DNA found in the **clots** was ***16 times higher*** than was present in just the surrounding arterial blood

Inflammation, Focal Infection, and Pathogens

Consistent with the seeding of coronary atheromas with oral pathogens of root canal and periodontal (deep gum) origin, this also occurs in cerebrovascular arteries. Root canal-related bacteria were found in **most** patients with ruptured and unruptured intracranial aneurysms. [23761916; 26777430]

Inflammation, Chronic Pathogen Colonization, and Pathology

- Alzheimer's disease: *Chlamydia pneumoniae* often present [9749980] Spirochetes and Lyme pathogens often found as well [15665404] Also herpes simplex [18973185] Fungus [24614898] *Porphyromonas gingivalis* [30746447]
- Cerebral thrombi with oral bacteria [31117858]
- Multiple sclerosis cerebrospinal fluid with fungi [23322279]
- ALS, fungi in cerebrospinal fluid and brain tissue [25892962, 29859870]

Root Canal-
Treated Tooth

In addition to the **cause-and-effect** relationship that is now ***established*** between root canals and atherosclerosis, a strong link has also been long-noted between root canals and cancer.

In the 1950s when very few root canals were being done, relative to today, Dr. Josef Issels found that ***98%*** of his adult advanced cancer patients had, in Issels' words, "between two and ten dead teeth." Dr. Issels categorized a root canal as a dead tooth. Issels always extracted these teeth first, and his cancer survival rates were quite phenomenal.

"Dead" teeth represent the sum total of root canal-treated teeth and asymptomatically infected teeth (apical radiolucencies)

Root Canal-
Treated Tooth—Issels

However, Dr. Issels also found that 10 to 20% of the patients had heart attacks during the treatment program. This was virtually completely eliminated when he include **tonsillectomy** as a routine part of his treatment protocol. He asserted that 100% of the extracted tonsils appeared morphologically normal externally but were extensively infected and abscessed on pathological examination after extraction.

Chronic Coronary Disease Treatment

Eradicate Occult Tonsillar Infections

Most infections significantly lowering antioxidant stores through the body will be found in dental sources. However, for many individuals, chronically infected tonsils will significantly impair or even block the recovery from many different chronic diseases, **INCLUDING CORONARY ATHEROSCLEROSIS**. Usually, tonsils that need extracting will be on the same side of the body as an existing or **even previously extracted root canal-treated tooth**. Generally, once a tonsil has drained a root canal or other infected tooth for any significant length of time, it cannot recover even if that tooth is extracted. Rather, it becomes a source of chronic focal infection, seeding pathogens and toxins throughout the body.

The tonsil ***protector*** becomes the ***infector***.

Chronic Coronary Disease Treatment

Since chronically infected tonsils typically appear ***normal*** (size and morphology), and it is known that tonsils become easily and chronically infected, several interventions can resolve this infected state.

Chronic Coronary Disease Treatment

Consider injecting both tonsils with ozone ***routinely*** for every dental visit (quick, cheap, helps resolve even low-grade tonsillar infection with patients that have chronic or intermittent periodontitis continuing to seed the tonsils draining them). One protocol:

- 30 gauge needle 1.5 inches long
- Concentration 10 to 50 gamma, up to 2.5 cc per injection
- Inject anterior and rear pillars of both tonsils

Also inject any identifiable swollen or inflamed lymphoid tissue with ozone as well.

Chronic Coronary Disease Treatment

Additionally (or alternatively), put several drops of 1% methylene blue directly on each tonsil or as close to them as possible. The MB is highly anti-pathogenic as well as non-toxic to the body. As it is fat- and water-soluble, it penetrates the tonsils, the extracellular spaces, the cytoplasm, and even the subcellular organelles (e.g., mitochondria) very well, and very quickly. It also readily tracks along any route by which the infection might be spreading.

This same protocol (including direct ozone injection) can also quickly resolve acutely infected and enlarged tonsils associated with tonsil stones and pockets of pus (such as in childhood tonsillitis)

Chronic Coronary Disease Treatment

If available, doing ear ozone insufflation can not only eventually deliver ozone systemically, it can also work to eliminate any chronic pathogen colonizations that can be present and contributing to the sustaining of chronic pathogen colonization in the nose, throat, and upper lungs. Remember the middle ear has a direct connection to the nose and throat via the Eustachian tubes.

Chronic Coronary Disease Treatment

In this application ozone and MB are harmless, and profoundly beneficial.

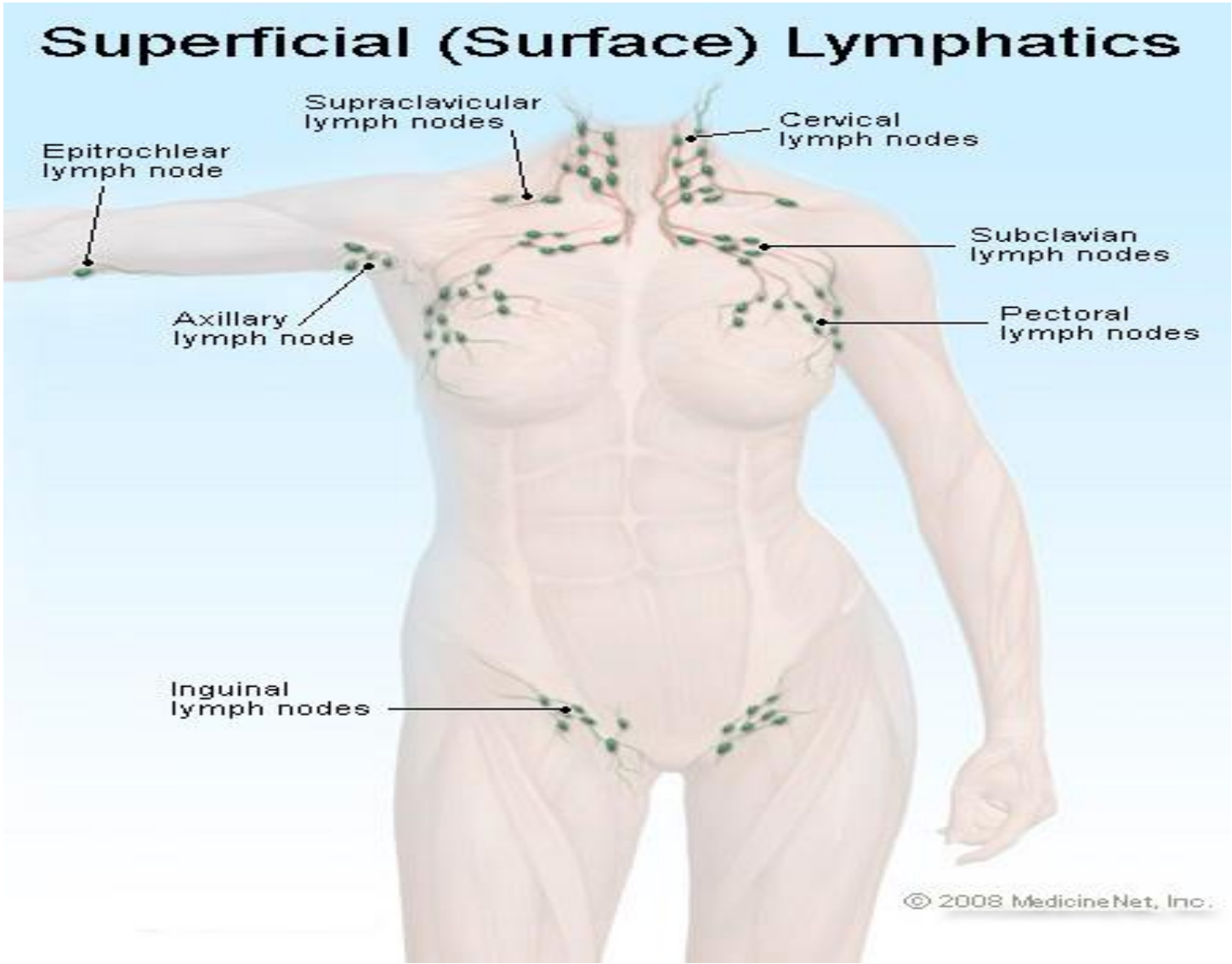
Many heart attacks result from infected tonsils that remain chronically infected long after the infected teeth have been removed and the chronic periodontitis resolved.

The infected tonsils may well be as big a factor as chronically infected teeth and gums, as indicated by Dr. Issels' experience.

The Chronically Abscessed Tooth

The draining lymphatics and veins of the jaw and mandible make significant antioxidant depletion (increased oxidative stress) most likely to occur to the greatest degree in the head, neck, and chest (lymphatics) and the coronary/cerebral arteries (venous drainage). Once the pathogens and toxins enter the venous drainage, the first artery to be encountered is the coronary artery, with the attendant high arterial pressure and shear force facilitating their endothelial localization/implantation.

Lymphatics, Neck and Chest



Lymphatics, Neck and Chest

While the lymphatic system is designed to flow in only one direction, disease, inflammation (as would be seen with the chronic presence of oral pathogen toxins in the lymph), enlarged lymph nodes, and other conditions can result in **retrograde** lymphatic flow as well. This effective "sharing" of lymphatically-drained pathogens and toxins makes the head, neck, and chest especially sensitive to the antioxidant depletion caused by root canals, and it is an especially major factor in the causation of cancer in the head, neck, and chest.

Cancer and Very Elevated Oxidative Stress

Cancer ONLY originates where intra- and extracellular oxidative stress is at its highest. It NEVER occurs where oxidation is only at its physiological (normal) levels.

Pathogens of root canals and other infected teeth origin have been **consistently isolated and grown from the cancer cells themselves as well as from the extracellular space surrounding them**.

Pathogens, Toxins, and Cancer

Pathogens have been consistently found and cultured from most cancers that have been examined. These cancers include:

- Oral, head, and neck [31167516]
- Esophageal [27769987]
- Liver [34250613]
- Prostate [26053031]
- Pancreatic [36256708]
- Colorectal [37764202]

Pathogens, Toxins, and Breast Cancer

Relative to normal breast tissue, researchers have found 10-fold (**1000%**) more bacteria in breast tumors [24421902, 37007104]. Furthermore, while normal breast tissue can have small amounts of benign microbes, as it is draining the microbe-rich mouth, the microbes found in breast cancer are aggressive, invasive **pathogen species** that have been documented to be causes of malignant transformation.

Pathogens, Toxins, and Breast Cancer

With the very rarest of exceptions, cancer, especially breast cancer, as well as coronary artery disease, NEVER arises in the absence of on-site massive increases in oxidative stress from indwelling pathogens of oral cavity origin.

Any woman with any breast condition (including benign lumps) should FIRST see a biological dentist (NOT a traditional dentist) and get a 3D X-ray of the mouth to identify all possible sources of chronic infection.

Tonsils should always be treated as though they are infected. There is not much foundation for optimism if her first intervention is chemotherapy from an oncologist.

Cancer is typically a disease resulting from the MOUTH, not the body, nor the site where it is manifest.

Pathogens, Toxins, and Breast Cancer

Any mouth that has had (or has) root canals, infected gums, or other infected teeth will have chronically infected tonsils, even though they look normal in size and appearance. This infection must also be resolved as well for the optimal treatment of the breast cancer (or any other condition) patient. See this article for greater detail and literature support for this information:

https://orthomolecular.org/resources/omns/v19n45.shtml

Lymphatics, Neck and Chest

Any treatment plan in a patient with a brain tumor or breast cancer that does not include a proper extraction of root canals and other infected teeth is **MISSING** the ***most consistent and reliable way*** to both get a tumor remission and a maintenance of that remission (or CURE), without relapse or the appearance of a new malignancy. **The cause of a cancer must be eliminated along with the cancer itself in any complete cancer treatment protocol**.

Periodontal Disease

Periodontal (gum) disease is very common in the population today. The presence of this condition has now been well-established to be an independent risk factor for coronary artery disease. [18807098; 19165177; 20367093; 23730671; 23676848; 23713486]

Not surprisingly, periodontal disease features the **SAME ARRAY** of pathogens and toxins, and the oxygen-starved environment, as infected teeth. Advanced periodontal disease and advanced tooth decay are often the reasons that a tooth becomes infected and leads to the abscessed tooth and the root canal procedure being performed in the first place.

But What Causes the Chronic Inflammation?

Periodontal disease has long been clearly "linked" to the presence and evolution of atherosclerosis [21375559; 22313976].

Periodontal disease (deep gum infection) has also been recognized as an ***independent risk factor*** for coronary artery disease [18807098].

The truth: Periodontal disease is usually the PRIMARY site of pathogen growth that seeds pathogen growth EVERYWHERE ELSE.

Periodontal disease resolution MUST be a part of ALL treatment protocols for EVERYTHING!

Periodontal Disease and Chronic Degenerative Disease

Periodontal pathogen growth is the initiating source of the pathogens that have been documented to provoke and CAUSE all the following diseases/conditions:

- Increased all-cause mortality [27372888]
- Coronary artery disease [18807098]
- Diabetes and metabolic syndrome [27025874, 27055847]
- High blood pressure (hypertension) [24526921]

Periodontal Disease and Chronic Degenerative Disease

- Cerebrovascular disease and stroke [27418418]
- General vascular disease [19874452]
- Pulmonary disease [24155782]
- Arthritis, multiple forms [26861944, 27439545]
- Osteoporosis [27339765]
- Inflammatory bowel disease [24216685]
- Chronic kidney disease [27466240]
- Systemic lupus erythematosus [27371775]

Periodontal Disease and Chronic Degenerative Disease

- Neurological disease
    a. Alzheimer's [26385886]
    b. Parkinson's [25664991]
    c. Seizure disorders [24456623]
    d. Depression [27047405]

Periodontal Disease and Chronic Degenerative Disease

- Cancer
    a. Breast [27485780]
    b. Pancreatic [26474422]
    c. Colon [26923863]
    d. Head, neck, oral cavity, esophageal [15857075, 17515503, 23936684]
    e. Lung [27294431]

Focal Infection Containment

However, it cannot be overemphasized that focal infection AND chronic pathogen colonization ELIMINATION is the best way to avoid the evolution of coronary atherosclerosis and permit the pre-existing atherosclerosis to **REGRESS**.

This applies to breast cancer patients as well as to those women trying to prevent this cancer.

Periodontal Disease Treatment

Any infection and/or inflammation in the gums (even advanced conditions) is very effectively **treated and resolved** by daily, warm water irrigation (as with a Waterpik): 1 to 2 large cupfuls with one to two tablespoons of 3% hydrogen peroxide and a splash of preferred mouthwash for taste. A positive response is rapid, with initial significant gum bleeding at lower pressure levels improving to no bleeding at the highest pressure levels within a few weeks or much sooner.

Periodontal Disease Treatment

Very significantly, the initial gum bleeding at low oral irrigation pressures clearly indicates that even gums that appear perfectly healthy are NOT so healthy. If NO pathogens were already colonized in the proximal gum space, there would be no gum tissue trauma induced by the first irrigations.

But initial water irrigations always product a little bleeding that later resolves even when the highest pressures are applied.

ALSO, it becomes readily apparent that even advanced periodontal disease can completely resolve when the chronic pathogen colonization there is completely eliminated and not allowed to recolonize.

Periodontal Disease Treatment

Flossing should be **completely avoided** unless you have impacted food that water irrigation cannot reach, which is almost never the case, or you simply do not have the availability of water irrigation (traveling). Flossing for many people causes gum tissue trauma, which is never desirable, and it **DOES NOT ELIMINATE THE PATHOGENS** below the gumline. There is only an illusion that effective gum therapy has been rendered. And the traumatized gum tissue is much more susceptible to pathogen colonization/proliferation.

Periodontal Disease Treatment

A regular water irrigation treatment as described above would prevent most gum disease from ever developing, and it would completely resolve most existing gum disease.

Pathogen colonized gums are the primary reservoir of pathogens leading eventually to infected teeth and an ABNORMAL gut microbiome with leaky gut.

This simple procedure (with the hydrogen peroxide nebulization) can singularly resolve much disease and prevent even more.

Chronic Pathogen Colonization (CPC)

There are three basic forms of clinical pathogen presentations:

- **Body-wide**, as with the viral presence in influenza, or one of the infectious diseases of childhood
- **Focal and concentrated**, associated with, or capable of generating, identifiable accumulations (abscesses), e.g., infected teeth
- **Chronic pathogen colonization** (CPC), a less focal area of pathogen growth, and with overall lesser concentrations of pathogens, typically "protected" from eradication by persistent biofilms, which can increase the resistance of the pathogens 1,000-fold to some antibiotics [29235402]

Chronic Pathogen Colonization (CPC)

CPC generates toxins and pro-oxidant pathogen metabolic byproducts “24/7” (including a large amount of free iron), and these are continually swallowed, **making the maintenance of a normal gut flora (microbiome) impossible as long as the CPC persists**.

CPC and the Intestinal Epithelium

The toxic, pro-oxidant products of pathogen growth and metabolism in areas of CPC growing in the aerodigestive tract continually (“24/7”) inflict oxidative damage to the cells they encounter upon bein swallowed. This chronic oxidative damage results in the barrier function of these intestinal cells to become minimally to profoundly compromised, resulting in the presence of the “leaky gut syndrome.”

Is a "Leaky Gut" Really a Chronic Disease?

The intestinal epithelial cells have one of the highest turnover rates anywhere in the body, with intestinal stem cells working to have each epithelial cell replicated anew between **every 3 to 5 days** [32567155]. This also means that when an "old" cell is once again replicated, the contribution of that cell to a leaky gut ceases, as it begins its existence providing a renewed normal barrier function with other regenerated cells before new toxic oxidative damage takes place.

Chronic Pathogen Colonization (CPC)

Once present, **CPC generally persists indefinitely**, due to tenacious biofilms, and this "pathogen residua" of a cold or a bout of influenza can persist, literally for **LIFE, until and unless specific measures are taken to eradicate it**. Also, it **easily reacquired**.

Chronic Pathogen Colonization (CPC)

Eradicating areas of CPC requires an agent that **destroys biofilms** and then subsequently destroys, or allows something else to destroy, all variety of pathogens.

Currently, there is no effective ***prescription*** medicine or agent that will reliably destroy/disrupt a persistent biofilm and then kill the previously protected pathogens. **However, hydrogen peroxide is very effectively in eliminating biofilms**, as well as in eliminating the pathogens once the biofilms are gone. It is not the only such agent, but it is the most natural, inexpensive, and readily accessible agent that can readily destroy biofilm and underlying pathogens. It is the most effective as well.

Chronic Pathogen Colonization (CPC)

For colds and influenza, go straight to hydrogen peroxide. A 3% solution nebulized is very effective and works very rapidly. Some tingling/mild burning in the nose and throat may occur as the mucosa is irritated after the pathogens have been killed; this resolves promptly following nebulization. Lower concentrations, 1% or less, can still be effective while being much more comfortable for the more sensitive person (or child or baby).

When a cough persists post- peroxide nebulization, follow with VC-Mg chloride nebulization, with or without DMSO, to increase antioxidant levels inside the affected cells and "calm" them down, easing any cough

Excellent for babies; just be prepared to suction out increased production of mucus and secretions

Chronic Fungal Disease and HP Nebulization

Pathogenic fungal growth is just one of many abnormalities that is seen in the abnormal microbiome, with its associated leaky gut and indiscriminate dissemination of pathogens, toxins, and incompletely digested foods. This serves to sustain increased oxidative stress throughout the body, and it also serves to **seed different tissues and organs with CPC**, in addition to the seeding provided by gum, tooth, tonsil, and sinus infections.

One Powerful Anecdote

Dear Dr. Levy, THANK YOU, THANK YOU!! GOD BLESS YOU!!!!! for boldly sharing your research on hydrogen peroxide with the nebulizer!! THIS IS CURING MY FAMILY'S VERY SERIOUS BLACK MOLD POISONING ILLNESSES!! THANK YOU!!! MY husband and I have 5 children and **for over 15 years** now our whole family has had serious illness, chronic infections, and neurological issues from black mold exposure in our home years ago and **3 of our children almost died**, one spent a week on a ventilator in ICU and 2 weeks of oxygen. It has been a journey for years with our functional medicine trying to recover and we **avoid all grains, gluten, dairy, sugar**, we had to throw out ALL of our family belongings because the mold contamination was so severe and we chose to buy a brand new house and start completely over.

Within ONE hydrogen peroxide nebulization session I was UNBELIEVABLY better!!! EVERYTHING IS SO MUCH BETTER (with my family). Our digestion, bowel movements, inflammation, energy, and even neurological problems are soooo much better!

Crohn’s Disease and HP Nebulization

Crohn’s disease definition (from the Cleveland Clinic):

Crohn's disease, also called regional enteritis or ileitis, is a ***lifelong*** form of inflammatory bowel disease (IBD) [my emphasis added]. The condition inflames and irritates the digestive tract — specifically the small and large intestines. Crohn's disease can cause diarrhea and stomach cramps. It's common to experience periodic disease flare-ups.

Crohn's Disease Cured

Hi Dr. Levy

I wanted to give you an update on my (now) 16 year old son Matthew. He is the one I was asking you about 18 months ago who had chronic Chrons Disease - and I was asking about nebulising HP.

Since discussions with you, we took Matthew off infliximab infusions and ALL immuno-suppressing drugs. Much to our specialist paediatricians dismay and outrage. Matthew was supposed to be on these hideous protocols for life. Not that it was figuring to be a very long or enjoyable life the way he was so very sick.

We put him on a protocol of nebulising HP each day, and gave him vitamin C, D3, Quercetin, NAC, Zinc, and Black Seed Nigella Sativa.

With HP and supplements he rapidly lost a whole lot of fat which he had put on with all the steroids they had him on, and his height shot up to over 6 foot after no growth in his body for a long time. (Doctors had been concerned that he was very short and fat for his age)

We refused to let him be vaccinated with any more shots - especially the C-19 that they were pushing so furiously.

Long story short - he took about 9 weeks after his last infusion to get the infliximab out of his system. One day at about the 9 week point he suddenly said to me that it was like a light switch had been flicked and he woke up feeling healthy and full of energy - and he has gone from strength to strength!!!! Absolutely NO symptoms of Chrons whatsoever. He is now playing American Football, Basketball and Volleyball. He goes to the gym daily and is working full time. This from a boy who spent over 2 years in hospital, and when he was home he could hardly get out of bed due to feeling so sick and having no energy!! It's a miracle and I'm so so grateful to you for your book on HP and the courage it gave us to try something against the mainstream narrative for his health.

He now nebulises maybe once a fortnight - or whenever he feels a sniffle coming on - as do we all. It helped us all get through covid without batting an eyelid.

My 17 year old daughter had struggles breathing when she got covid (we are all unjabbed btw) and her oxygen sats were down to 86. We put her on the nebuliser and kept the oxy-monitor on her finger and watched her o2 levels go back up to 99% within a couple of minutes!! It was just so wonderful and empowering. I have passed on your book and encouraged a dozen families to get a nebuliser and use HP and they have all found it beneficial.

All that to say thank you. I saw an email come through with you and Bryan Ardis and it prompted me to write.

Have an awesome day,

Chronic Pathogen Colonization (CPC)

All optimal disease management **REQUIRES** optimal gum health and eradication of chronic pathogen colonization, which will also NORMALIZE the gut and its ability to wreck the health of the entire body.

Recap

- All disease **IS** excess oxidation, and not a further condition caused by it. **Resolving the excess oxidation resolves the disease**.
- Toxins are the sole reason for excess oxidation.
- Vitamin C is the foundational antioxidant in the body. When normal cellular levels of VC can be achieved, the cell is normal.
- Chronic infection/pathogen colonization is the primary source of disease-causing toxins in the world population. Accumulated heavy metals and persistent spike protein are also important sources.
- Oral cavity infections account for most conditions resulting in fatality across the planet. Specifically, heart attacks and breast cancer would be rare with a pathogen-free mouth.

Contact Information

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While I can field most questions, I cannot offer specific consultative medical advice to anyone wanting to know how to deal with their personal condition. I can provide informative links to help such an individual.