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Chloride Depletion Syndrome

Enabling factor in systemic degeneration and healing locks

Hydrochloric Acid is essential to primary detoxification and nutrient systems in the body. Failure of multiple Chloride circuits assures degenerate health. This paper explores the multiple relationships of HCL and chronic shock in progressive degeneration and healing stops in shock and toxin-related syndromes.

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Overview

Hydrochloric acid, or HCl, is a strong acid primarily produced by the stomach to ionize foods and kill food borne pathogens.

Chlorine, the back half of HCl, is a primary agent used by the body to oxidize and ionize food during digestion.

Chlorine's use as a oxidizing agent outside the stomach is poorly recognized.

This paper seeks to identify the multiple roles, beyond primary digestion, that chlorine plays.

The functional purpose of the disclosure is to provide indications and methods to recognize and support indications of HCL depletion resulting from use of Chlorine to neutralize/oxidize toxins elsewhere in the body.

Oxidation

Oxidized agents or fully reacted are often called ash, because they are inert, and can no longer participate in chemical reactions.

HCl is an ionized combination of Hydrogen and Chlorine. Ionic components are elemental hydrogen, and chlorine.

Don't confuse ionic forms in the body with the stuff poured into pools.

Generally Chlorine is an element in the Halide series. Halides generally have a high oxidation number, which reflects their ability to neutralize electronegative agents.

Many toxins require neutralization and various oxidation agents:

- Oxygen
- Chlorine
- And many more

Are used to neutralized would be toxins so they can be eliminated safely.

Salts

Salts pair chlorine, an acidic-like reagent, with an alkali-like reagent, like sodium.

In water the reagents like strongly polar water more than each other, so they hang close in water, their electrostatic closeness prevents them from easily reacting with other substances.

Seawater has a lot of chlorine, but it is neutral because the chlorine prefers to hang out with the sodium.

Chlorine versus Pool Water

Free chlorine is a toxic gas. It is toxic because it is very strong and bonds to carbon, and almost anything that will oxidize. This is corrosive.

This only happens when the alkali mate is missing.

This attribute is what gives it a strong smell and makes it useful for sanitation. It literally burns everything it touches.

Free Chlorine Kills

Use of chlorine to purify water is the same challenge. Most organisms expose organic substrates that can be oxidized.

The chlorine is so strong that it bonds to any molecular electronegative area and quenches any potential reaction.

Free chlorine will burn just about any organic substance. This is why it is used in pools as a sanitation agent.

Sodium hypochlorite recently emerging as a MMS, is the raw ingredient for bleach, sodium hypochlorite, releases free chlorine when it is exposed to an acid.

Oxidized Agents

Chlorine in bleach is chlorine hypochlorite. Bleach releases chlorine gas, a super strong oxidization agent which burns anything, when the pH shifts acidic.

In the body

Uncontrolled burning, like breathing chlorine gas is bad.

On the other hand, controlled burning where chlorine is precisely deployed near something that needs burning is good because it can neutralize the destructive potential of an agent.

This hidden role of neutralizing toxins is pretty much unrecognized.

Chlorine is easily transported. Chlorine ions, or chloride, are stick near neutralizing anions limiting their oxidative potential.

Stress Compensation

An unrecognized role, by Welt and Revici is that Chlorine plays the pivotal role in stress compensation metabolism and shock buffering.

Individuals with chronic disease, or ongoing environmental stress, nearly always end up in a sustained stress pattern which causes chlorine to redeploy from its recognized digestive role to a detoxification role.

Sustained redeployment disables digestion, and primary detoxification circuits, which fundamentally disables health.

Stress Chemicals

Stress and stress toxin neutralization appears to require several minerals from the halide and oxygen series.

The group 16 elements have a valence of 2:

- Oxygen
- Sulfur
- Selenium

Group 17 elements have a valence of 1:

- Fluorine
- Chlorine
- Bromine
- Iodine

These agents, properly deployed are primary agents to neutralize toxins in the body.

Inverse Size

In water, the smaller atoms make bigger clumps. Elemental electrostatic forces organize water. Strong forces from smaller elements organize more than weaker forces from bigger elements.

Big elements make small clumps because weaker electrostatic forces don't organize as much water.

Revici articulated the inverse relationship where bigger elements were more active at lower organizational levels. The bigger the element the deeper it works.

This author suggests that Revici's observations on biological activity domain resulted from the hydrodynamic ability of elements to organize water.

He also developed techniques to incorporate minerals into lipids to deliver them deeply into an organism.

For detoxification model, big elements work at deep levels while small elements, work at higher levels.

Valence Difference

Group 16 elements present with a valence of -2, while Group 17 elements have a -1.

The numbers reflect the quantum electron vacancy that they want to fill. This "want" drives chemistry.

Stress Chemistry

Stress lock appears to be a new physiology concept.

Stress lock occurs when physiological depletion from stress is enough to make stress physiology unrecoverable.

The notion stress has is biochemical condition, in addition to neurological, and emotional, is significant.

The body responds to stress by deploying stress response chemicals, special lipids, from the adrenals, and other organs, as a trauma survival response. Revici, Welt and others documented this effect.

Medically the condition is called shock. Shock varies in severity from life threatening to chronic.

Welt and Revici documented that prolonged shock disrupted chlorine metabolism and caused systemic alkalosis, which triggered alkali components to be discarded in urine to compensate for the disappearance of acids into cells.

Revici documented a major imbalance which occurred under stress was the appearance of chloride bound to lipids in cells.

They asserted that chlorine is a primary agent to neutralize cellular stress response agents.

Stress is part of the survival response process. The first stage adrenal release causes special lipids to enter circulation, which accumulate in distressed cells.

The lipoids produce an immediate cellular defense similar to fight or flight, to improve trauma survival ability.

Since trauma presumes toxins, cells use these agents to manufacture anti-toxins to help them survive toxin exposure.

The anti-toxins tend to accumulate.

Pathology Indications

This was further supported by Chinese researchers who use electricity to treat cancer tumors.

They indicate large amounts chlorine gas is released when small amounts of electricity are used to treat tumors.

The entire room immediately starts to smell like chlorine gas. The phenomenon is unexplained.

So why does chlorine accumulate in disease tissue?

Neutralization Agents

Chlorine accumulation appears to be a neutralization agent.

It seems reasonable that chlorine is used to neutralize the noxious agents which are generated by the pathogen process.

So, when the body is under a toxic load, the chlorine goes to where it's needed most.

Since toxin neutralization is a higher priority of than digestion, then chlorine deficiency in the stomach is a natural result of too many toxins.

Stress Stops Digestion

Digestion is the first victim of most stresses because the chlorine goes away.

With long term stress, the long term chlorine depletion becomes a primary factor in the condition.

Chlorine Circuits

Chlorine deficiency appears to be a factor that makes is a critical factor in many disease states.

Chlorine depletion appears to be at the primary factor in chronic conditions.

Chlorine depletion becomes permanent when the chlorine drains equals free chlorine intake.

Free chlorine from salts is limited by the body's ability use the mineral component from the salt, Na, K, Mg – to enable the free chlorine for other jobs.

Since the metabolic processes that use these agents also become pathogen limited, the collateral imbalances that occur under stress, seem to reduce free chloride availability, and contribute to the lock.

The trick appears to be to balance the salt mixture so that the anionic components get used, and supplies extra chlorine to settle chlorine depletion.

Chlorine utilization appears to depend heavily on oxygenic-column, -2, mineral cofactors:

- Oxygen;
- Sulfur;
- Selenium.

The detailed relationships are unknown – however chlorine settlement seems to work much better when the sufficient amounts of these reagents are available.

RBC Transport Inhibition

There seems to be a correlation in blood color and stress. Individuals under prolonged stress have blood which does not oxygenate well and remains dark when exposed to atmospheric oxygen.

A finger prick presents a dark colored blood which slowly absorbs oxygen.

A potential explanation for this is that the oxygen binding sites are occupied by neutralized toxins for transport to the liver.

When the liver and detox paths are inhibited, then the sludge remains bound to the RBC's limiting oxygen transport capability.

This observation proposes that hemoglobin binding sites that normally carry oxygen seem to serve a dual role.

This model suggests reason why toxic individuals have oxygenation related dysfunctions, and hypoxia, in spite of "O2" saturation levels which don't indicate a problem.

Since oxygen is a universal detox agent, and since transport becomes limited, an transport overload seems to add another lock factor to the mix: No oxygen when oxygen is critical.

Needed oxygen for detox can't be delivered when the binding sites on the red blood cells are plugged with toxins, then hypoxia is guaranteed.

This is another possible lock factor.

Degeneration

Long term depletion of chlorine for digestion leads to structural degeneration.

- Did you ever wonder that old people hunch over?
- Did you ever wonder why lung capacity diminishes with health?
- Why would muscles and organs spontaneously break down?

Cellular Starvation.

Digestive Degeneration

We propose free chlorine deficiency is the primary cause of cellular starvation.

Missing chlorine quietly but steadily limits the building materials for tissue. Long term chlorine depletion, from toxic, pathological, or other stress, redirects chlorine to toxin neutralization roles.

When this happens long enough, starvation sets in because long term digestion is weakened.

Did you ever notice that people under stress start to sag and eventually hunch?

Think about hunching.

When the muscles which hold the spine erect become weak they stop holding the spine in place. The result is shoulders head droops forward. Posture sags.

So why do these muscles get weak?

The body uses itself for food. Absent minerals and protein from digestion, resulting from chlorine drain, the body starts to digest muscle to preserve life.

If the stress resolves, the body rebuilds the muscle and life continues. When the situation goes unresolved, degeneration continues until death.

Ever notice that people with annoyingly good posture rarely get sick?

Lung Degeneration

The lungs are tender. The tendency for lung capacity to decrease under stress further reflects tendency for the body to digest lung tissue for survival.

Did you ever notice that the sicker someone is, the less lung capacity they have?

Ever notice that people with good wind are sturdy, almost regardless of age?

There is a reason. Lung capacity & integrity reflects metabolic reserves.

Individuals with sufficient cellular nutrients aren't in the process of digesting their lungs, or spine to survive.

Health exam first glance: good posture structural health and good wind indicates organ health because these people aren't eating themselves to survive.

Chlorine Depletion

Stomach chlorine is always missing in any degenerate condition.

The tendency to presume that it is an effect of degeneration instead feels dead wrong.

Chlorine depletion, driven by stress (all kinds), causes a kind of starvation.

Sturdy people have spare chlorine – and within reason, more is better.

Stomach Acid Primer

Stomach releases hydrochloric acid, or HCl. This acid is responsible for:

- Killing potentially pathogenic organisms in food;
- Breaking down proteins into building blocks and minerals.

When stomach aid fails, digestion is bad from top to bottom, literally. This is typical with autism.

Upper digestion is fueled by Hydrochloric acid, which is copious in healthy children. Little known references by Welt on shock provide actionable clues to why HCL becomes and remains functionally deplete in autistic kids.

The first clue is the Type A blood that most autistic kids share. These kids have immune systems which are a bit more permissive, and enable different flavors of pathogens like viruses, mycoplasma, and who knows what else to gain foothold. We refer to this spectrum of inhabitants as *bugs*.

These bugs manufacture substances which provide them a survival advantage, *toxins*.

Many species manufacture toxins that interfere with the immune system. As bugs and toxins accumulate, the autistic kids become a zoo, where the immune system and gut are an unrecoverable wreck, which prevents almost anything from healing.

Individuals with type-A blood exhibit weaker immunity, hence are more susceptible to pathogen foothold, especially when the immune system takes a critical hit from ischemic trauma.

Chlorine as Detox

Revici documented that individuals with ongoing immunological or stress load exhibit decreased stomach acid.

This phenomenon is likely a result of the body's utilization of chloride for stress and noxious toxin neutralization in preference to digestion, likely because poison presents a greater metabolic threat than starvation.

Indications of this chronic condition show several telltales:

- Poor digestion;
- Systemic alkalosis (2 x Saliva pH + UpH) / 3 > 6.4 Click here for more information. The body discards alkali substances to compensate for an absence of acids.

Prolonged absence of stomach chlorine prepares the gut for multiple infections which contribute to deadlock:

- Forever malnutrition;
- Continuous source toxin from gut;
- Cellular toxin backlog from inhibited liver flow.

Welt / Revici Chlorine Pathway

Welt and later Revici documented use of chlorine donors to buffer shock. In simple terms most stressors, including pathogens, cause the body to produce anti-toxins which bias metabolism to resist the influence of the toxin.

Prolonged or repeated toxin exposure tends to cause accumulation of these anti-toxins which aggregate into persistent metabolic anti-toxin bias.

Fortunately the body also creates an anti-toxin breakdown mechanism to dissolve these agents over time.

Breakdown of persistent anti-toxins is governed by anti-toxin metabolites involving primary reagents chlorine, sulfur and selenium.

Welt used Chlorine donors to buffer shock.

Autistic Chlorine Depletion

It appears likely that opportunistic pathogens present in autism. It is further likely these agents trigger generation of anti-toxins, which in turn deplete oxidative minerals, chlorine, sulfur and selenium.

The author suggests that the depletion is the likely source of several observable attributes:

- Ongoing digestive under performance downstream of the stomach;
- Gut environment which hosts pathogenic gut flora due to nutrient stream inappropriate to healthy gut flora;
- Liver stagnation where bile accumulates as a result of balancing stomach acid;
- Bicarbonate accumulation resulting in inflammation of pancreas and upper third of the small intestine;
- Lesion formation throughout the gut as a result of surfacing chlorine-neutralized anti-toxins reentering the digestive system.

Resolving Chronic Chlorine Depletion

Continuous anti-toxin breakdown demand likely depletes mineral reserves, particularly chlorine, sulfur and selenium. Most autistic children tend to exhibit hyperactivity that

attributes to accumulated catabolic anti-toxins.

Generally, pathogenic toxins are suppressive. In response, anti-toxins are excitatory. Interventions that evidence elevated excitatory behavior indicate a decrease in primary toxin load – and unfortunately an apparent worsening of hyperactivity symptoms in spite of therapeutic benefits.

The remaining challenge is to accelerate the breakdown of the anti-toxins, and curtail the hyper-excited response.

Use of lipid-bound selenium and sulfur with chlorine-donor salts titrations to accelerate drug detoxification has proven beneficial with individuals diagnosed with MS and ALS who exhibited similar neurological-excitation phenomenon.

Chlorine Deficit recovery & Gut Healing

This strategy proposes concurrent nutrient profile toward restoring gut:

- Dietary chlorine donor salts (not NaCl), KCl, MgCl, NH4Cl to supply sufficient chlorine to satisfy system toxin neutralization demands;
- Probiotics to aggressively seed the gut with healthy flora;
- Beet top product and choline to encourage bile flow;
- Aloe and other polysaccharides to support gut healing;
- Anabolic intestine extracts to accelerate healing of intestinal lesions.

Most importantly this program can be incorporated into food. The flavor profile of these agents is mostly salty, sweet, or tart.

Chlorine Circuits

Ongoing stress demands that the body breakdown and dispose of stress response agents.

This is where the stress response reagents play a huge part:

- Chlorine
- Sulfur
- Selenium
- Probably more.

Shock

Clinical shock is

Stress accumulates creating a persistent shock.

Long term shock depletes shock buffers, and sets the nervous system into a survival pattern of fight-or-flight, which becomes a long term, sometimes life-long metabolic state.

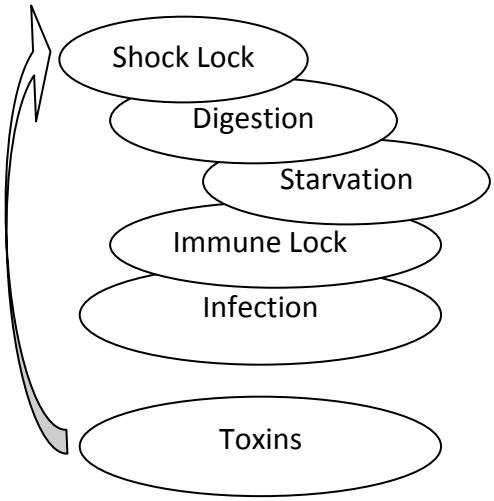
Chlorine buffers, deplete, see digestion discussion, disabling first-stage digestion. Without chlorine, the lower gut becomes a pathogen incubator, which cranks out more toxins...

Chronic stress triggers adaptive growth patterns. Cellular and systemic metabolic development adapts to tolerate antagonistic influences which persist from the cascade sequence.

Persisting stress drives core adaptations, which causes cumulative deviation from normal development during growth.

Eventually a portion of the deviance becomes built in and the compensatory deviance persists until the body can grow out of the condition.

In summary, the sooner the effects of the cascade resolve, the less compensation gets built in during growth.



The Digestion Problem

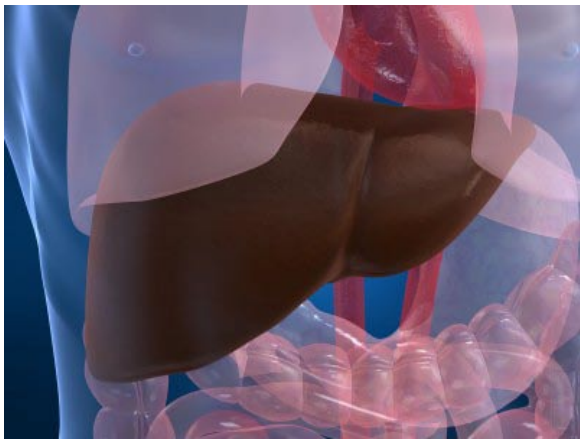
Both nutrient selection and waste disposal processes must be in good order to enable healing.

Starving cells in toxic soup cannot repair.

Digestion is often thought an "intake" process. More correctly it is the master sorting process where the body sorts food from trash.

> It seems odd to start discussion on fixing brain damage by talking about poop.

The liver serves as the top of the recycling chain where most of the bodies recycled material collects into bile, which is also used for digestion. Click here for a video tutorial.



The liver dumps body internal waste into the top of the digestive tract to sort out what to keep. That which the body chooses not to keep is exits as poop.

Digestion is a multi-phase process.

1. Chew and swallow breaks the food into preferably tiny pieces and mix in first stage enzymes from saliva;
2. Food lands in stomach to mix with Hydrochloric Acid for ionization, aka stomach acid (severely deplete in most autistics – for reasons we will discuss later);
3. Acidified food exits into duodenum to mix with bile for lipid emulsification, and enzymes from liver/pancreas break down proteins, sugars and fats for later processing in the gut;
4. Small intestine hosts many bacteria which convert foods into a massive spectrum of building blocks;
5. Intestines selectively absorb building blocks into the blood, which goes to the portal vein;
6. Which goes 80% to the liver, which extracts components needed to continue digestion and discard more toxins;
7. Everything not absorbed exits as poop.

Autistic Poop

Autistic kids nearly always exhibit poor bowel flow, and develop symptoms of malnutrition almost regardless of diet.

Parents of autistic kids say "I tried diet and it didn't work". This is a natural and inevitable result. Unless digestion works diet is almost irrelevant.

Both poor nutrient absorption and gut-toxins naturally result of compromised digestion. Malnutrition inhibits healing

while toxins interfere with healing. Both contribute to the problem.

1. Early digestive breakdown begins in the stomach where an absence of stomach acid fails to prepare the food for digestion, ionize minerals, and kill potential pathogens normally resident in foodstuffs;
2. Absence of acid prevents the liver from bile release which fails to emulsify fat and conduct the second stage of digestion leading to poor liver flow, further leading to clogged lymphatic flow, hence cellular toxin accumulation;
3. Semi-digested food remnants feed pathogenic organisms which survive the stomach that should have killed them with stomach acid.
4. The organisms make noxious toxins which etch and eventually damage gut.
5. The damaged gut leaks toxic waste into the blood.
6. The immune system cleans clean the blood, and generates antibodies that enable future immune responses to toxic byproducts that result from broken digestion leading to food alergies.

Stinky Poop

Gut flow stalls resulting in constipation and/or a stinky mess in the toilet which looks and smells more like rot than poop.