Clinics in Oncology

Review Article
Published: 27 Sep, 2022

Immune Neuroplasticity (Power Within, Adaptive, Horizontal) is Weakened by Vaccines and Drugs (Power Without): Mitochondrial Sink Holes, Genomic Destabilization and Immune Disorders-Hypothesis

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Abstract

A parallel between defense powers of sovereign nations and effective immunity that guards health is relevant to demonstrate vulnerability of immune system under external forces (toxins, infections, drugs, pathogen-specific vaccines). History demonstrated that sovereignty (power within) of small nations often threatened or destroyed by military might of powerful nations (power without) who use false-flags and propaganda for motives that are financial-control-driven. Similarly, we propose that body's complex immune neuroplasticity (power within, adaptive, horizontal) is stretched-thin and weakened by the external forces, particularly by vaccination of the unborn/newborn or immune-compromised individuals. Validity of genomics (innate, perpendicular) as origins of 'hereditary' diseases (e.g., allergies, diabetes, cancers) that for decades dominated research and treatment is also challenged.

In conclusion, we propose that the pressure/power from within creates life with potential to sustain health, while the pressure/power from without, weaken and destroy life. Deep understanding of molecular intelligence of immune neuroplasticity is expected to help develop accurate risk assessment formulation and universal safe vaccines toward minimizing environment-gene-immune responses for a healthier society.

Keywords: Acute and chronic inflammation; Acquired-induced; Bioenergetics; Constituent and inducible receptors; Fetus; Genomics; Glycolysis; Immunity; Immune compromised; Immune disorders; Infant; Inheritance; Mitochondria; Newborn; Placenta; Power within; Power without; Sovereignty; Trophoblast; Tumorigenesis; Tumoricidal; Vaccines; Yin-Yang

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Received Date: *25 Jul 2022*
Accepted Date: *08 Aug 2022*
Published Date: *27 Sep 2022*

Citation:
Khatami M. Immune Neuroplasticity (Power Within, Adaptive, Horizontal) is Weakened by Vaccines and Drugs (Power Without): Mitochondrial Sink Holes, Genomic Destabilization and Immune Disorders-Hypothesis. Clin Oncol. 2022; 7: 1940.

ISSN: 2474-1663

Introduction

Immune neuroplasticity (Power within): Bioenergetics requirements at different stages of life: Vulnerability toward external powers (Vaccines)

If there is no enemy within, the enemy without can do us no harm. Sir Winston Churchill

Effective immunity is referred to an amazingly complex bio-electromagnetic and acquired molecular crosstalk between immune and non-immune (vascular-hormonal-neuronal-metabolic--genetics-lipids) systems, collectively described as cell-mediated and humoral immunity (CMI/HI). Time-energy-dependent interactions (negative and positive signal switches) of autonomic sympathetic and parasympathetic properties of immunity possess high degrees of molecular intelligence for protecting health. We defined effective immunity as the balance between 2 highly regulated and biologically opposing arms, Yin (tumoricidal, degeneration, apoptosis, tear) and Yang (tumorigenic, regeneration, wound healing, wear) properties of self-terminating acute inflammation (immune surveillance) [1-6].

Within two years after birth of newborn and exposure to air oxygen and environmental conditions, mitochondria, organ functionalities and tumoricidal (Yin) arm of effective immunity (power within) are completed [1,2].

Optimal operation of immunity (polarization-depolarization capacity of Yin-Yang) requires differential bioenergetics (biorhythms) for defending the body against exogenous or endogenous threats with the following features (Figure 1) [1-6].

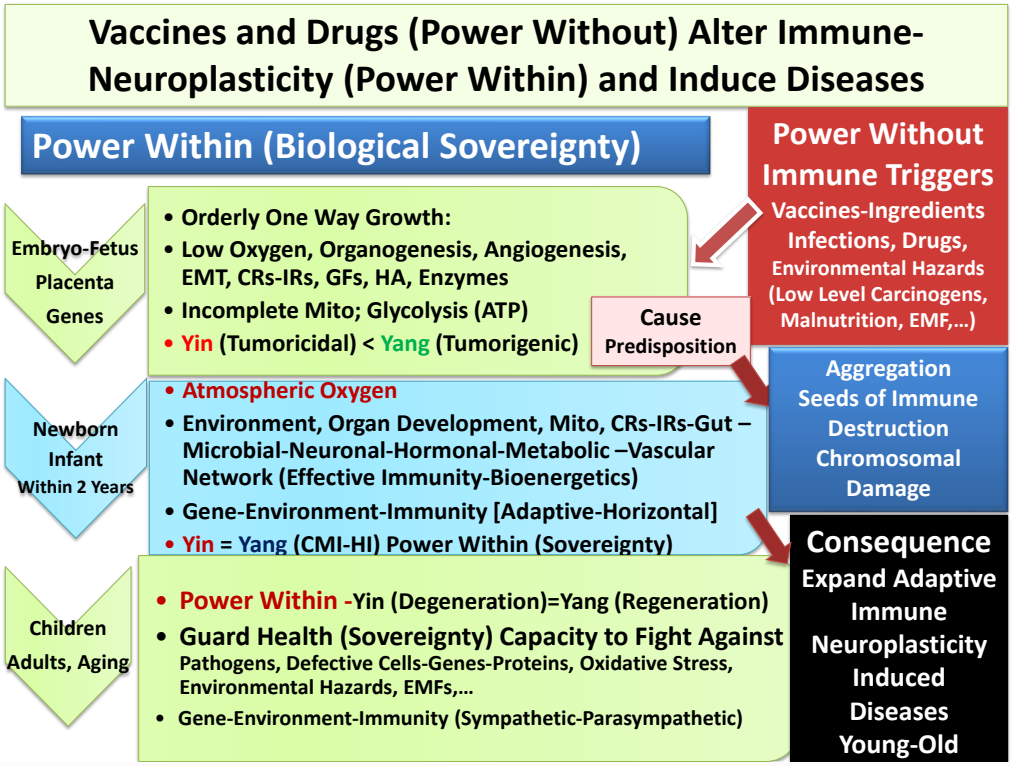

Figure 1: Schematic representation of immune neuroplasticity (power within, biological sovereignty) at different stages of life. It depicts that fetus organogenesis and angiogenesis occur under hypoxia where glycolysis is the main source of energy for unidirectional growth (Yang) within protected environment of placenta. Mitochondria and tumoricidal (Yin) arm of immunity are not completely developed during fetus growth. Power within (effective immunity) and completion of organ development and immunity (gene-environment-immunity, balance between Yin and Yang) are depicted to be completed within 2 years after birth and exposure to atmospheric oxygen. Expression of various constituent or inducible receptors (CRs, IRs), growth factors (GFs), epithelial/mesenchymal transition (EMT) are shown to be influenced by environmental factors (power without) at different stages of life. Immune triggers such as vaccines and ingredients, infections, low level carcinogens are depicted as seeds of immune destruction affecting mitochondrial bioenergetics and immunity that alter chromosomal/genomics stability; as likely bases for cause, exacerbation (aggregation) or consequence of induced diseases. See text.

(a). Yin events demand high energy expenditure (ATP hydrolysis) from mitochondrial oxidative phosphorylation to destroy foreign entities and injured tissues. Stimuli-induced Yin signals include specific danger molecules, receptors, vasoactive and cytotoxic/neurotoxic agents, cytokines/chemokines (e.g., TLRs, ILs, TNF-α, histamine, ILs, oxidases).

(b). Yang events require low energy from cytoplasmic glycolysis to neutralize and repair or remodel tissue, during which time mitochondria shut down for regeneration of TCA intermediates. Yang processes express wound healing mediators (e.g., TNFdRs, Ils, IRAK-M, SODs, GFs, catalase, IFN, hormones, kinases).

(c). Acute inflammation differentially affects tissues that are immune-responsive (e.g., epithelium, mucus-secreting cells, vasculature) or immune-privileged (e.g., CNS, BBB, neuroretina, reproductive system).

At different stages of life, fundamental pathways that profoundly influence activities of mitochondria and immunity (tissue growth and necrosis) include pathways that are involved in constituent and inducible receptors (pattern recognition molecules) and related enzymes [e.g., pyruvate kinases (PKM1, for muscle, heart or brain function; PKM2 (embryonic tissues); PKL (liver), PKR (erythrocyte)] or diverse insulin Rs; ARNT-HIF-1; histidine-histamine Rs and numerous other receptors that contribute to posttranslational regulation, architectural integrities and function of tissues (e.g., proton pumps, cation-anion transporters, water channels, surface molecules, growth or apoptotic factors) [1-6]. For example, numerous receptor molecules contribute to visual transduction, bone and lipid biosynthesis, bioenergetics, cellular infiltration, differentiation and growth, nuclear/chromosomal or chromatin activities, neuronal pathways and pattern recognition of pathogens or foreign elements and are involved in tissue necrosis (degeneration) or growth (regeneration) [1-11].

After birth the genetically-determined constituent receptor molecules are often immediately influenced by the signals they receive from the environment and adapt to the quality of nutrition (initiated from mother's milk) and exposures to a variety of bioactive agents, microorganisms, environmental chemical and biological hazards, including pathogen-specific vaccines that shape body's immune neuroplasticity (horizontal, adaptive) [1-6][a,b].

Vaccine toxicities: Cause, exacerbation and consequence of mild, moderate or severe immune disorders: Weakening effective immunity (power within)

Despite lack of systematic studies on vaccines development or safety and existence of major knowledge gaps or inconclusive data on casual relationships between vaccines and immune disorders, an overview of information on vaccination of unborn/newborn/infant and immune-compromised individuals or comparison of data between vaccinated and unvaccinated group provide sufficient

evidence that current pathogen-specific vaccines, including injections with synthetic-engineered mRNA/DNA spike protein against corona virus, are likely the cause and consequence of significant increased in immune disorders in four generations in America (Figure 1) [1,2,4,11-18 (manuscript in preparation)][c,d,e,f].

Vaccination of pregnant women, at different stages of embryo-fetus growth could disturb and destabilize orderly organogenesis and angiogenesis and immune neuroplasticity, immediately after birth or weeks, months or years later. Vaccination of unborn could alter delicate biology of trophoblast (asexual)-embryo-fetus-placenta and epithelial-mesenchymal transition (EMT) and the timely expression or inhibition of constituent or inducible receptors and mitochondrial development that are required for maintenance of health throughout life (Figure 1) [1,2,12-17].

Vaccine-associated injuries (e.g., fatigue, autism, allergies, hypotonia, neuropathological episodes of epilepsy, Rett syndrome or encephalomyopathy, autoimmune and neurodegenerative disorders or cancers) are likely the results of one or more molecular defects in immune response profiles. Vaccine ingredients [e.g., aluminum, thimerosal, detergents, glyphosate, engineered DNA/RNA, lipid nanoparticles, yeast extracts, aborted fetus tissues, L-His, hydrolyzed gelatin or filterable viruses] could retard or compete with electrochemical properties of proteins that require trace elements (e.g., $Fe^{+2,+3}$, $Cu^{+1,+2}$, Zn^{+2}, Mg^{+2}) for their functions [e.g., inner/outer mitochondrial membrane complexes (I, II, III or IV), metal carriers, enzymes [1,2,4,19,20 (manuscript in preparation)]. Mitophagy is associated with impaired chromosomal-genetic activities and mismatched expression or co-expression of pro-, anti-inflammatory mediators, immunoglobulins, surface molecules, memory complexes of B/plasma and adaptive regulatory T cells (Treg), altered Th1/Th2 ratios, GSH: GSSH, NAD+: NADH recycling and altered tissue oxido-redox potentials. Unborn/newborn vaccination could also profoundly influence composition and behaviors of microbiomes in gastrointestinal tract (gut-brain axis) and neurophysiology of histidine-histamine pathways often associated with altered genetic/chromosomal stability and epigenetic modifications [1,2,4,12-17,19,20 (manuscript in preparation)].

It is noteworthy, that stimuli (vaccines)-induced allergies are generally classified as clinical symptoms of three types of tissue responses a) IgE-mediated (acute, type 1 reactions); b) non-IgE-mediated (cellular or delayed type hypersensitivity); and c) mixed (IgE-mediated and delayed type responses)] and bases for a wide range of chronic disorders [1,2,4,5,10].

In brief, tissue overstimulation by drugs and/or pathogen-specific vaccines and the impaired mitochondrial function is likely to retard/weaken the fighting capacity of immunity (power within). Over-vaccination would strech-out (strech-thin) the natural polarization-depolarization capacity of Yin-Yang events; features of unresolved inflammation (oxidative stress) that would lead to immune tolerance or intolerance. Unresolved inflammation (subclinical, oxidative stress) was demonstrated as a common denominator in the induction of nearly all acute and chronic diseases [1,2,11].

Immune-neuroplasticity (adaptive, horizontal) v. genomic (innate, perpendicular): Challenging validity of inherited disease origins

Different theories of aging biology (e.g., oxidative stress, genomics, telomere, immunity) are reviewed elsewhere [2]. Below, we challenge the validity of decades-old theory of inheritance-genetics-somatic mutations that dominated heavy investment, attempting to describe the origins of many diseases (e.g., sickle cell anemia, progeria, allergies, cancers) [1,2,4,16,21,22 (manuscript in preparation)][g,h,i].

Cancer and many neurodegenerative and autoimmune diseases became inducible 'inherited' diseases in the last four generations, ever since the public consumed virus-contaminated polio vaccines in 1955's/1960's. Evidence for extensive changes in dual properties of immune responses, as prime suspects in damaging the chromosomal structures/functions, increased mutations in nuclear or mitochondrial DNA and altered epigenetic modifications that could lead to induced diseases are outlined below [1,2 (manuscript in preparation)]:

(a). Nearly all known classic disease categories (congenital, inherited, neonatal or induced) that occurred at the rates of 1% to 5%, in the last century, shifted to increase induced diseases (rates of 20% to 50%) in young and old, by heavy consumption of drugs and over-vaccination and/or repeated exposures to low level carcinogens;

(b). After birth, inducible signals that contribute to gene-environment-immune interactions possess adaptive behaviors with super-packages of electrochemical communications that parallel neuronal brain function;

(c). Sympathetic-parasympathetic responses that shape immunity present horizontal (adaptive, stretchable) behaviors that cannot be explained by limited nature of genomics (innate, perpendicular) to define inherited diseases (e.g., cancers);

The author proposes that conditions that are traditionally identified as inherited diseases are the results of inflammation-induced irreversible damage to parental-ancestral chromosomes that permanently alter expression of constituent and adaptive (inducible) receptors or surface molecules toward tissue dysfunction. 'Inherited' disorders [e.g., allergies, emphysema, diabetes and cardiovascular complications, neurodegenerative and autoimmune diseases (e.g., autism, Alzheimer's, lupus, ALS), cancers] are likely the results of altered immune responses that secondarily destabilize chromosomal activities (e.g., DNA/RNA repair mechanisms, epigenetic modifications and related protein expression profiles).

Support for this concept comes from analyses of our original studies along with integration of data on developmental biology, genetics of infectious diseases, vaccine injuries and the current disease-status in young and old in America [1-6,10,11,20,21,22 (manuscript in preparation)]. Our models of ocular inflammatory diseases resulted in a series of first reports on time-dependent developmental phases of immune dysfunction toward multistep tumorigenesis and angiogenesis. Hypersensitivity reactions that developed in the newborn, born from highly sensitized animals suggested pre-genetic disposition. Data on vaccination of unborn/newborn or individuals who are immune-suppressed reveal the likelihood of alterations of time-energy-dependent immune responses (e.g., mast cells mediator releases, T and B/plasma cells over activation) that would secondarily damage stabilities of chromosomal components and alter expression or co-expression of pro-, and anti-inflammatory responses toward disease induction [1,2,4,12-17,22-24].

Concluding remarks: Promoting power within for improving health

The initial immunity and tolerance in respiratory and gastrointestinal tracts develop during fetus organogenesis and angiogenesis in the protective environment of placenta. Unborn or

newborn exposures to genotoxins or even 'safe' vaccines would deny the defense capacity of body before immunity is completed. Current pathogen-specific vaccines, including synthetically engineered genetic segments of corona virus (mRNA, DNA) spike protein, encapsulated in lipid nanoparticles that are claimed as 'vaccines' could threaten mitochondrial bioenergetics and proper expression of constituent and inducible receptors that are required for anabolism-catabolism processes, and are the likely bases for induction (acquired) of short-, or long-term health problems (eg, allergies, neurodegenerative and autoimmune diseases, rapid growth of benign tumor/cancer or increased infections) [1,19-24 (manuscript in preparation)][i,j]. Universal safe vaccines or prophylactics that prevent diseases should mimic the natural course of immunity and likely to enhance the biological power from within. Efforts to limit excessive activation of gene-environment-immune neuroplasticity are keys for maintaining balance in Yin and Yang capacity of effective immunity.

It is so recognized that the pressure/power from within creates life with potential to sustain health, while the pressure/power from without, weaken health and destroy life.

Acknowlegements

Original discoveries on experimental models of acute and chronic inflammatory diseases that resulted in multistep tumorigenesis and angiogenesis were established at the University of Pennsylvania, School of Medicine in 1980's. Author's challenging efforts to promote the role of inflammation in cancer research, molecular diagnosis, design of clinical trials and cancer therapy are documented at NCI/NIH since 1998. Author is grateful to many professionals affiliated with Children's Health Defense (CHD) for sharing valuable and timely information on diverse topics for preparation of this article.

References

1. Khatami M. Deceptology in cancer and vaccine sciences: Seeds of immune destruction, mini electric shocks in mitochondria- Alter neuroplasticity/electrobiology of response profiles and increased diseases in 4 generations. A hypothesis. Clin Trans Med. 2020;10(8):e215.
2. Khatami M. In Inflammation, aging and cancer: biological injustices to molecular village that guard health. Springer, Berlin; 2017. pp 1-389.
3. Khatami M. "Yin and Yang" in inflammation: duality in innate immune cell function and tumorigenesis. Exp Opin Biol Ther. 2008;8:1461-72.
4. Khatami M. Cancer; an induced disease of twentieth century! Induction of tolerance, increased entropy and 'Dark Energy': loss of biorhythms (Anabolism v. Catabolism). Clin Transl Med. 2018;2;7(1):20.
5. Khatami M. Is cancer a severe delayed hypersensitivity reaction and histamine a blueprint? Clin Transl Med. 2016;5(1):35.
6. Khatami M. Unresolved inflammation: 'immune tsunami' or erosion of integrity in immune-privileged and immune-responsive tissues and acute and chronic inflammatory diseases or cancer. Exp Opin Biol Ther. 2011;11(11):1419-32.
7. Gotlib J, George TI, Carter MC, Austen KF, Bochner B, Dwyer DF, et al. Proceedings from the inaugural american initiative in mast cell diseases (AIM) investigator conference. J Allergy Clin Immunol. 2021;147(6):2043-52.
8. Raefsky SM, Mattson MP. Adaptive responses of neuronal mitochondria to bioenergetic challenges: Roles in neuroplasticity and disease resistance. Free Radic Biol Med. 2017;102:203-16.
9. Kallio PJ, Pongratz I, Gradin K, McGuire J, Poellinger L. Activation of hypoxia-inducible factor 1alpha: posttranscriptional regulation and conformational change by recruitment of the Arnt transcription factor. Proc Natl Acad Sci U S A. 1997;94(11):5667-72.
10. Khatami M. Chronic inflammation: synergistic interactions of recruiting macrophages (TAMs) eosinophils (Eos) with host mast cells (MCs) and tumorigenesis in CALTs. MCSF, suitable biomarker for cancer diagnosis! Cancers. 2014;6(1):297-322.
11. Khatami M. Inflammation, aging, and cancer: tumoricidal versus tumorigenesis of immunity: a common denominator mapping chronic diseases. Cell Biochem Biophys. 2009;55(2):55-79.
12. Giannotta G, Giannotta N. Vaccines and neuroinflammation. Int J Pub Health Safe. 2018;3;163.
13. Graf WD, Marin-Garcia J, Gao HG, Pizzo S, Naviaux RK, Markusic D, et al. Autism associated with the mitochondrial DNA G8363A transfer RNA(Lys) mutation. J Child Neurol. 2000;15(6):357-61.
14. Khatami M. Safety concerns and hidden agenda behind HPV vaccines: another generation of drug-dependent society? Clin Transl Med. 2016;5(1):46.
15. Cowan T. In: Vaccines, autoimmunity, and the changing nature of childhood illnesses. White River Junction, Vermont, London, UK: Chelsea Green Publishing; 2018. pp. 1-169.
16. Bonifácio Andrade E, Lorga I, Roque S, Geraldo R, Mesquita P, Castro R, et al. Maternal vaccination against group B Streptococcus glyceraldehyde-3-phosphate dehydrogenase leads to gut dysbiosis in the offspring. Brain Behav Immun. 2022;103:186-201.
17. Kumagai T, Ozaki T, Kamada M, Igarashi C, Yuri K, Furukawa H, et al. Gelatin-containing diphtheria-tetanus-pertussis (DTP) vaccine causes sensitization to gelatin in the recipients. Vaccine 2000;18(15):1555-61.
18. Hammond, J R. In The FDA, Covid-19 Vaccines, and Scientific Fraud: How the US Government Puts Children's Health at Risk in Service to the Pharmaceutical Industry, Worldview Publications, 2022 FDA-COVID19-Vaccines-Scientific-Fraud.pdf (jeremyrhammond.com)
19. Khatami M. Immune neuroplasticity (power within) is weakened by vaccines and drugs (power without): mitochondrial sink holes, genomic destabilization and immune disorders-hypothesis. Preprint. 2021.
20. Ajdary M, Keyhanfar F, Moosavi MA, Shabani R, Mehdizadeh M, Varma RS. Potential toxicity of nanoparticles on the reproductive system animal models: A review. J Reprod Immunol. 2021;148:103384.
21. Pairo-Castineira E, Clohisey S, Klaric L, Bretherick AD, Rawlik K, Pasko D, et al. Genetic mechanisms of critical illness in Covid-19. Nature. 2021;591(7848):92-8.
22. Sayaman RW, Saad M, Thorsson V, Hu D, Hendrickx W, Roelands J, et al. Germline genetic contribution to the immune landscape of cancer. Immunity. 2021;54(2):367- 86.e8.
23. Eeva J, Postila V, Mättö M, Nuutinen U, Ropponen A, Eray M, et al. Kinetics and signaling requirements of CD40-mediated protection from B cell receptor-induced apoptosis. Eur J Immunol. 2003;33(10):2783-91.
24. Baylin SB, Abeloff MD, Wieman, KC Tomford JW, DS Ettinger. Elevated histaminase (diamine oxidase) activity in small cell carcinoma of the lung. N Engl J Med. 1975;293(25):1286-90.

Footnotes

a. Anne Maitland. Mast cell activation syndrome: More than "just allergies". 2018.
b. Children of parents exposed to pesticides more likely to develop cancer. 2022.
c. Xiaoxu Sean Lin. Vaccines are bringing back a nearly eradicated deadly virus. 2022.
d. Histamine. An underrated, key player in the treatment of long CV19 with Dr. Tina Peers, 2021.

e. Celeste McGovern. Thousands report developing abnormal tumors following COVID shots. 2021.

f. Brian Shilhavy. 10,000% increase in cancers following COVID-19 vaccines as doctors and scientists worldwide sound the alarm. 2022.

g. Health Impact News. Mapping the Genome and Modern Genetics: Eugenics Repackaged for Modern Times (healthimpactnews.com), July 4, 2015.

h. "Epigenetics: How your mind can reprogram your genes," Dr. Joseph Mercola. 2022.

i. Association Found Between Frailty, Multiple Medications in Older Blood Cancer Patients Association Found Between Frailty, Multiple Medications in Older Blood Cancer Patients | Inside Precision Medicine, August 17, 2022.

j. Kristina Marusic. Toxic PFAS chemicals in fracking wells detected in drinking water. 2022.