

Traumatic Brain Injury: a Case Report and Its Contribution to Understanding the Underlying Mechanisms - Alpha-Emitting Nanoparticulates Proven as Key

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Abstract This case report on a mild traumatic brain injury (self-diagnosis of the author on his own brain) leads to alpha-emitting nanoparticulates whose major contribution to TBI is confirmed by the extremely strong occurrence of TBIs in war veterans (with wideranging administrative data available to confirm the extremely strong typicality of the case). This allows a better and clearer understanding of the secondary injury events following TBI such as blood-brain barrier damage, mitochondria dysfunction and massive neuron death, of the various neurodegenerative disorders usually diagnosed following TBI such as chronic traumatic encephalopathy, chronic traumatic brain inflammation and indirect traumatic optic neuropathy, and of the risks of ischemic stroke following TBI.

Keywords: *traumatic brain injury, chronic traumatic encephalopathy, chronic traumatic brain inflammation, neurodegenerative disorders, indirect traumatic optic neuropathy, diffuse axonal injury, ischemic stroke, concussion, vision changes, impulsivity, apathy, impaired memory, impaired alertness, anxiety, depression, ear ringing, alpha-emitting nanoparticulates, uranium, thorium, radium, air pollution, particulate matter, plutonium, depleted uranium*

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1. The Case Report

The author is reporting on his own brain after a number of rapid movements, accumulation of chlorine felt in the brain (acid pH) and contamination with alpha-emitting nanoparticulates due to various cumulated factors.

The author determined in a past study the direct effect of chlorine accumulation drawing alpha-emitting nanoparticulates near the accumulates and fostering progressive cell destruction around due to the alpha decay energy damaging and destroying organic matter at range [1,2].

The alpha-emitting nanoparticulates are easy to feel in the brain. Limited inflammation and chronic headaches result from their activity ; the location of the particles is clearly sensed. Sometimes, some micro haemorrhagias in the brain are also noted with a slight taste of blood spilling down into the palatal area. This is in combination with some degree of salinity accumulated around the brain, in the amygdala area and on top of the motor cortex. Stars and bright spots in retinal vision also happen together with alpha decay in the areas closest to the eyes (the precise point where the alpha decay happens is in parallelism with where in the vision field the bright star or spot is : a decay

happening near the top right of the forehead is associated with a bright spot in the top right of the vision field). Rapid movements without actual shocks, by jumping a little bit rapidly in stairs for instance, typically cause small memory losses and dizziness - see again [1] for the pattern.

A quick check in comparison with a recent paper on the subject [3] confirms the symptoms:

slowed information-processing and impaired long-term memory, attention, working memory, executive function, social cognition and self-awareness. Mental fatigue is frequently also associated and can exacerbate the consequences of neuropsychological deficits. Personality and behavioral changes can include combinations of impulsivity and apathy.

All of the above have been noted by the author on his own brain. The Defense and Veterans Brain Injury Center also lists ringing in the ears (noted by the author), slowed thinking (also noted), irritability, anxiety, depression and mood swings (all four also noted) together with other vision changes and decreased level of alertness.

Working on this paper somehow worsened the symptoms -any exercise of the brain of course mobilizes resources and leaves it more exposed, as natural self-regeneration and work cannot truly coexist.

2. Discussion

The author frequently goes walking in the streets of a rural area which nevertheless sees typical car pollution (with so-called NORMs in fumes). In addition, the recent activity of volcanoes has added a new level of contamination with alpha-emitting nanoparticulates in the environment around the world, especially the recent eruption of the Taal volcano and its massive rate of ash production causing hence a strong radioactive fallout in the atmosphere, pushed by winds around the globe.

Normally, blood circulation fostered by physical activity permits transfer of the alpha-emitting nanoparticulates into kidneys and bladders, testicles (with small bubbles typical of the alpha decay (helium nuclei) in the sperm) and digestive system. But in this case, strong lack of motor function due to recent period of cold, humidity in the winter has almost ended the possibilities for physical activity and depuration, leading to the unusual accumulation in the brain. The ongoing radioactive fallout of the volcano has caused additional contamination and further discouraged outside physical exercise, increasing accumulation inside the brain and fostering a mild traumatic brain injury.

Drinking coffee allows to alleviate the contamination - the nanoparticles are drawn into the digestive system thanks to the very high pH of the drink. Belching also helps when it evacuates salinity. With these, the transit of alpha-emitting nanoparticulates causes temporary changes in brain senses: for instance, as a nanoparticulate that was located in an area above the eye falls down behind it after belching negatively charged water (pH was obvious to the tongue), a temporary vision change happened as the nanoparticulate it attracted passed behind the eye. Belching a negatively charged vapor brought negative charges closer to the brain and increased activity, for the positively charged alpha-emitting nanoparticulates, taking down some that were stuck in brain areas. This is a natural reaction of the body to protect the brain from internal contamination, activated by high intakes of coffee, contributing to the excretion of internal contamination.

As alpha emitting nanoparticulates decay, the rate of alpha emission increases since half-lives are typically shorter and shorter over time (except with transuranics) so past contamination can be forgotten yet persist as marginal parts of earlier nanoparticulate intakes have survived (their low radioactivity shielding them from the attraction effect of coffee) and wake up later, dividing themselves again in smaller pieces as the decay breaks the particles, leading again to the same effect (the pattern amounts to a fractal shape - zooming in brings back the same shape again and again).

The endocrine disrupting effect of alpha-emitting nanoparticulates in internal contamination was well underlined (in [1] and [4]) and recently confirmed in TBI [5].

In a questionnaire to veterans of the Canadian military forces [6] it has been noted that half only of those with mild traumatic brain injury received such damage after a blast which is logical due to the widespread contamination by depleted uranium dust in warfields, independently of explosions (together with all the lighter sources of contamination with „NORMs“ e.g. in motor fumes of the mechanized units for infantry groups walking near them, natural contamination with alpha emitters in meats served

in meals etc.). It has been noted that traumatic brain injury is an extremely frequent injury in US veterans with 413 858 cases for the 2000 to 2019 Q3 Department of Defense data - most cases listed as mild, akin to concussion, to a level similar to the author. These are of course in most cases a direct effect of their own contamination with alpha-emitting nanoparticulates, including in particular depleted uranium.

It is reminded that even in laboratory settings, on mice for instance which have been used for many experiments to reproduce artificially TBI, there already is a limited contamination with „NORMs“ impacting the experiment, radon in the laboratory and contamination of water and foods given to animal subjects for instance (compare with [7]).

3. Comments

Any physical shock onto a subject already suffering from internal contamination with alpha emitting nanoparticulates in the brain can cause the TBI, and further decay hours, days or weeks after the shock amplify it. Exposure to neutrons (from solar radiation for instance) also increase the brain injury and the sole combination of physical shocks and solar neutrons may cause brain injury but it should not persist for a long time, becoming traumatic and with degeneration e.g. subsequent chronic neurodegenerative disorders or ischemic stroke. The degeneration is intrinsically linked to internal contamination with alpha emitting nanoparticulates and their particular decay chain (except transuranics). As underlined in [8], there are overlays in chronic neurodegeneration after TBI, between Alzheimer's disease (and dementia [9]), chronic traumatic brain inflammation and chronic traumatic encephalopathy - this is explained by the common factor of alpha-emitting nanoparticulates in internal contamination and the variety of their effects depending on their precise location in the brain and on the share of decay energy received (cell necrosis, inflammation, overproliferation due to bystander effect...).

It should be noted that, as nanoparticulates have typically a positive charge except for the smallest ones, they are repelled by each other and stay at a distance - hence area-nature of the damage usually observed. Diffuse injury is typical of TBI for that reason - it has for instance been shown that diffuse axonal injury results in a higher chance of unfavourable outcome [10]. Likewise for indirect traumatic optic neuropathy, which is typically an area phenomenon, linked hence to a group of alpha-emitting nanoparticulates.

As concerns ischemic stroke risk, significantly higher in TBI subjects than in the general population (the increase in ischemic strokes was already seen in a population contaminated with acute levels of depleted uranium and not consuming strong levels of salt, in Bosnia-Herzegovina [1]), the bystander effect of alpha-emitting nanoparticulates can produce local proliferation of endothelium cells and progressively create an obstruction: the alpha-emitting nanoparticulate can be located outside the blood vessel and its decay impact the vessel, the endothelium does receive solely a small share of the decay energy, cushioned by the periphery of the vessel, a configuration

ideal for bystander effect, the growth of an obstruction inside the vessel and an ischemic stroke. But there are other pathways, for instance alpha emitting nanoparticulates stuck inside the blood vessels, in the middle of endothelial cells starting as well proliferation in the periphery of the necrosis caused by their decay.

The patient should be able to sense himself / herself the nanoparticulates, listening to his/her own body, doing physical activity in a limited but regular amount (without any shock and excess leading to sweating, like bodybuilding), drinking coffee and regularly excreting. Energy-enhancing products and alcohol are of course discouraged. Water should be filtrated from alpha-emitting nanoparticulates. A vegan diet is strongly advocated for, so as to minimize contamination (since meat naturally accumulates heavy metals and hence alpha emitting nanoparticulates from NORMs in the cattle environment & feed (from phosphated fertilizers for feed production, NORMs in the fuel pollution around cowsheds for instance), as already discussed in [4]) and use of phytocannabinoids to foster self-regeneration after each opportunity to excrete is strongly recommended (so that, after nanoparticulates have been drawn out the cannabinoid intakes help new healthy cells to reform and fill the holes). With a permanent source of medical cannabis available for the patient, a vegan diet and no alcohol, physical rest should not be needed and return to usual activities immediately possible. It is in fact important to increase the probability of a capture of the nanoparticulates into the bladder by a constant blood flux itself fostered by some physical activity. Long periods of brain rest, avoiding all stress, are however essential. Ejaculation (for both men and women) together with miction eventually helps to the elimination of the alpha emitting nanoparticulates.

Due to „NORMs“ in the environment, mild traumatic brain injury is without any doubts a very frequent silent sickness in many humans around the entire world and self-defense measures such as coffee drinking and use of spices (see for instance [11,12,13,14,15]) already very widespread silent responses to these mild TBIs.

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