Transformation of Antibody Status in HIV/AIDS Patients Treated with Medicinal Synthetic Aluminum-Magnesium Silicate $\{Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3\}$

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ABSTRACT

Since viruses and abnormal cells are electrically charged, we postulated opposite charges electrostatic-mopping as treatment-mechanism for viral diseases and tumors. Molecules of Aluminum-magnesium silicate (AMS), WHO-approved medicine/adjuvant, consist of Nano-particles with positive and negative ends. Their ultra-small size (0.96 nm) enables them to get to all organs to mop viruses and abnormal cells. As an adjuvant and a silicate, AMS improves antimicrobials ` efficacies and enhances patients ` immunity. Mopping viruses and abnormal cells, clearing secondary infections and enhancing immunity cure viral diseases (including HIV/AIDS) and tumors. AMS- deposits may not exist in some countries and the medicine is un-absorbable. So, Aluminum silicate and Magnesium silicate (approved medicines) were used to formulate AMS-brand, named Medicinal synthetic AMS {MSAMS: $Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3$}. Dextrose monohydrate was incorporated to transport it into blood-circulation. That MSAMS-treated patient remained HIV-negative, 10 months post treatment has already been reported. Another patient monitored for 34 months also remained negative.

Keywords: mopping pathogens; enhancing immunity; clearing secondary infections; ams-*nanoparticles*; electrostatic attraction.

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I. INTRODUCTION

Any medicine that bonds to viruses will inhibit their attachment to cells of their hosts and so, terminate their infections (1) leading to cure for their diseases. Aluminum-magnesium silicate (AMS), a WHO-approved medicine, is made of molecules whose units are only 0.96 nm thick (*Nanoparticles*). The AMS-*Nanoparticles* have positive charges on their edges and negative charges on their surfaces (2, 3). Viruses are also electrically charged. RNA viruses including HIV are positively charged while DNA viruses and abnormal (tumor and infected) cells are negatively charged (4). So, we propounded the hypothesis of opposite charges electrostatic attraction for curing viral and abnormal cell diseases including HIV/AIDS. Since the AMS-*Nanoparticles* are much smaller than HIV (≥ 110 nm) they would get to all infected cells in all organs to mop both the virus and cells it infects, including the "sanctuary cells" ("HIV-reservoirs").

Though AMS is an existing medicine (5) its natural deposits do not occur in every country. Also, before now, its use as a medicine was restricted to treating localized ailments such as gastroenteritis and as topical applications because it is not absorbable. To make use of the two electrical charges on its *Nanoparticles* for systemic treatment of viral diseases and tumors, there was a need to get it into blood for circulation to all organs and tissues. So, we had to use two other medicinal minerals that are abundant in Nigeria (Aluminum silicate and Magnesium silicate) to formulate a brand of AMS which we

named *Medicinal synthetic Aluminum-magnesium silicate* (MSAMS) and developed a reaction-equation $\{Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3\}$ as formula for the *MSAMS*. To get the *MSAMS-Nanoparticles* (with charges, opposite those on any virus) into blood for circulation to all organs, we employed the principle of active transport (6). By that principle, Dextrose monohydrate (a simple sugar) is incorporated in *MSAMS* formulations to convey the *Nanoparticles* across mucous membranes into blood.

Electrostatic mopping of HIV and HIV-infected cells which is antiviral-mechanism of the *MSAMS* is a physical effect. So, the medicine is safe for the long treatment-durations often needed to terminate HIV-infections. Medicines that act physically are better than medicines that inhibit viral biochemistry in treatment of HIV/AIDS because similarity of viral biochemistry and biochemistry of animal cells makes medicines that inhibit viral biochemistry to exhibit intolerable side effects when treatments are prolonged.

For its small size (≥ 110 nm: 7) HIV, reaches and infects some cells in the brain, bone marrow and testes which big molecules cannot reach. Those inaccessible cells are called "sanctuary cells" or "HIV-reservoirs" because infections in them cannot be terminated by existing antiretroviral medicines (ARVs). It therefore means that size is vital in developing medicines that can achieve permanent cure for HIV/AIDS. Since the AMS *Nanoparticles* are much smaller (3) than even the smallest HIV, the medicine gets to and terminates HIV-infections in every cell and in every organ or tissue, including the "sanctuary cells". The positive charges on HIV (8) and the negative charges on abnormal cells (9, 10) are biomedical markers by which the *MSAMS-Nanoparticles* mop HIV with their surfaces and destroy HIV-infected cells with their edges (3).

As a silicate, MSAMS also stimulates immunity (11) while as an adjuvant it improves efficacy of antimicrobials (12). Improving efficacy of drugs makes it possible to use lower doses for desired effects. Use of lower doses for treatments leads to further improvement of immunity. High immunity in patients compliments effects of drugs in terminating both secondary infections and viral infections.

To be sure that the HIV/AIDS cure which we have been reporting is permanent, we started monitoring patients who become HIV-negative for antibodies, after they stop taking any ARV. A patient was monitored every month, for 10 months (13). This second patient being reported was monitored 34 months after he recovered and has been without any anti-retroviral medicine.

II. CASE-HISTORY

A patient who recovered from HIV/AIDS was monitored for HIV-antibodies after 34 months, post treatment to extend the monitoring period beyond that of a recovered patient who was monitored for 10 months (13). Both patients were treated with a formulation of the *MSAMS* and Ampicillin trihydrate (Antivirt® A) and Immunace extra protection® (antioxidants) for one month.

Then, their treatment was changed to a formulation of *MSAMS* alone (Antivirt® B) and the antioxidants, till they tested HIV-negative (antibody and antigen). From the month they became antigen-negative, treatment with any ARV was stopped while they were tested for HIV antibodies.

III. RESULTS

It took 19 months of daily treatment with the *MSAMS* before the patient became HIV-negative (antibody and antigen). He has remained HIV-antibody negative for 34 months. He also remained in good health within the period.

IV. DISCUSSION

HIV/AIDS was said to be incurable. The opposite charges electrostatic attraction we introduced as a mechanism for curing viral diseases is an old scientific principle. It is also in literature that Aluminum-magnesium silicate which we are using for the treatment is an approved medicine.

Molecules of the medicine consist of *Nano-particles* which have both positive and negative

electrically charged ends while viruses have either positive or negative electrical charges. Again, size of the AMS-*Nanoparticles* is less than any known virus (≥ 5 nm). Even with these facts, some people still hold the belief that HIV/AIDS has no cure. They fear that those patients we reported to have recovered could test HIV-positive again, because HIV-infections in the "sanctuary cells" may not have been terminated.That HIV/AIDS was without cure till now, is not a mystery. Lymphocytes which the virus destroys are responsible for immunity (14) and immunity is vital in terminating viral infections because viruses are so small that they get to and infect cells which are inaccessible to most medicines.

In addition to the severe immune deficiency which HIV causes, it is very invasive and so, its infections take a long treatment-time to terminate. Use of medicines made to inhibit biochemistry of viruses is not good when treatments are to be for a long time, because, similarity of viral biochemistry and biochemistry of animal-cells makes such medicines exhibit intolerable side effects. Medicines that act physically have their own limitation which is that they need to get to every viral particle and every infected cell before terminating infections. When it is not possible for physical-effect medicines to reach all infected cells, immunity must be adequate for infections to be terminated. With the severe immune-deficiency caused by HIV, nothing is left to terminate its infections if physical-effect medicines (mild side effects) that cannot reach all infected cells are used in treating patients.

Sizes of active principles are therefore vital for antiviral medicines if they are to act physically. The discovery that every virus has either positive electrical charges or negative electrical charges and that abnormal (infected/tumor) cells are negatively charged while normal cells remain neutral (without charges) means that electrical charges are biomedical markers to exploit in developing medicines to act physically in order to terminate viral infections including HIV-infections.

The negative charges on surfaces of AMS-*Nanoparticles* enable them to displace HIV from cells. That means inhibition of the first stage in viral replication (1). Since the *Nanoparticles* have positive charges on their edges, they also bond to HIV-infected cells to mop and/or destroy them (3), thereby unmasking "hidden infections". Their ultra-small size (0.96 nm) makes it possible for them to get to HIV in every organ and in every cell, including the "sanctuary cells". Since the medicine acts by a physical effect (mopping), it is safe for prolonged treatment required to terminate infections of the very invasive virus.

Transformation of HIV-status from positive to negative observed with this patient suggests that he has been cured. No HIV-infected person can remain HIV-negative for more than six months (window period), without ARV. So, for persons who were confirmed HIV-positive to remain HIV-negative for 10 months and 34 months, respectively, without being on any ARV means that the *MSAMS* terminates the HIV infections and leads to cure for HIV/AIDS. If treated patients do not get exposed again they could remain HIV-negative for life.

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