

Vaccination is an Effective Way to Prevent Viral Diseases? Proposal for Oral Adjuvant System

Sakamoto D¹, Nagayoshi Y¹, Katoh Y², Yamaguchi N^{3*} and Sakamoto S¹

¹Department of Cardiovascular Surgery, Kanazawa Medical University, Uchinada, Ishikawa, 920-0293, Japan

²Department of Respiratory Medicine, Tokai Central Hospital, Gifu, Japan

³Ishikawa Natural Medicinal Products Research Center, Foundation, 108, Fukubatake, Kanazawa, Ishikawa 920-0176, Japan

1. Abstract

Background: A newly emerging Corona virus disease is necessary to provide international cooperation to regulate this virus. Extended IRS promised to induce immunological dysfunction with qualitative and quantitative. This disease led to age-related disabilities, but only a small proportion of the persons concerned seek medical attention. To concur the microbial disease, an establishment of vaccine is conventional way for prevention. However, virus diseases are different from microbial one, so the development of vaccine for virus diseases may differ from bacterial one.

Purpose: This report suggested that the establish a better virus vaccine innovates from classic vaccine preparation

Pathology of viral disease: Therefore, the viruses are absolutely dependent system for the production of their own species, they hide out in the host cell, such as liver cell by liver virus. Immunological attack of IgG antibodies to infected liver cell, induced hepatitis in the host. In other words, there was no pathogenic anomaly just seclusion by liver virus in liver cell.

Discussion points for the development of the Vires vaccine: A High titer of IgG antibodies may damage the virus-infected host cell. Only secretory IgA with secretory piece in the mucus membrane is effective to prevent virus infection. Immunoglobulin classes are absolutely important for the prevention of viral infections as the first line of defense.

Conclusion

1. Antibodies against the virus limited to prevent syndrome.
2. Hemopoietic herbal decoction may play an adjuvant for induce viral vaccine.
3. Serum IgG attacks virus together with host cell that share the room in the host.
4. The immunoglobulin class A, IgA, with secretory piece, is the most important for the development of the newly developing viral vaccine.

2. Keywords: viral disease, vaccine, COVID-19, oral adjuvant, immunoglobulin class, IgA, IgM, IgG, secretory IgA

Corresponding Author: Dr. Nobuo Yamaguchi, Department of Immunology, Faculty of Medicine, Kanazawa Medical University, Uchinada, Ishikawa, 920-02, Japan. E-mail id: serumaya@kanazawa-med.ac.jp

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Abbreviations: CAM; Complementary & Alternative Medicine, IRS: Immune Retread Status, SDT: Shi-Quan-Da-Bu-Tang, BYT: Bu-Zong-Ye-Qi-Tang, G-rich type: The individual that exhibit over 60% of granulocyte in peripheral blood, finding many in young gentleman, L-rich type: The individual that exhibit over 40% of lymphocyte in peripheral blood, finding lot in ladies and senile. HSH: Hot Spring Hydrotherapy

Introduction

A newly emerging Corona virus disease is necessary to provide international cooperation to regulate this virus [1-6]. Despite our defense system, innate and adaptable in the overwhelming problems of owning this dual system, the congenital and adoptive parents do not seem to guard or even prevent the development of an internal threat to survival [7]. However, every person in the world puts the risk of an immunomodulatory state in the daily life of internal and external. The factors that influence the acquired immune activity are systemic metabolic disorders such as medical side effect in cancer, diabetes mellitus, malnutrition, extreme exhaustion, stress and aging [8]. Together with recent advances in understanding the pathogenesis of infectious diseases and the identification of new therapeutic solutions, the prevention of the disease, in particular the

disinfection of the virus, remains suboptimal, and these clinical form are still associated with it. With a high risk of opportunistic infection due to immuno-deficient status [9-20]. Several studies reported the acquired immune-deficit condition still to values persistent for defense systemic network. So we need to choose a suitable menu to regulate immune function by leukocyte storage. The menu was summarized and listed as CAM: Complementary and Alternative Medicine [21-37]. In this script, we plan to gather evidence and evaluate it with the content proposed in the case of an immune deficit status and others. In other words, as a standard of assessment that defines immunological factors as the main elements, we will assess superior and inferior factors and timing in each physiological factor.

Recommend not only quantitatively, but also qualitatively, to evaluate “balance of lymphocytes, which is the compound of white blood cell and polymorphs” as a standard of immunological factors. Every creature in the world, including humans, exposes the risk of immunodeficiency in daily life.

A vertebrate animal acquired two ontogenic and phylogous defense systems and ontogenetically, innate and adaptable. Despite these defense systems overwhelming problems of possessing these dual systems, the innate and adoptive does not seem to protect or even prevent the development of an internal threat to survival. Several studies have indicated the immunomodulative, cardio-protective, antiviral, antioxidant, hepato-protective, antitumor, anti-diabetic activities of the bioactive compounds contained therein. We have tried to regulate the immune response by much ripe for fragile in daily stress and so on. In this article, we want to highlight the regulatory mechanism of hot source hydrotherapy. The circumstance of balneotherapy with the effectiveness of hot spring hydrotherapy, with the exception of cases of contraindication, has been medically beneficial approved to be effective in many stress-related disorders and improving the dysfunction of biological rhythm disorder as well as chronic diseases. The mechanism of effects has been reported in many studies, but many things are still unclear. We had prepared the native nonspecific gourd line outside the skin and/or mucous membrane. However, the Gourd line is easily broken by accidental affair. However, a non-specific and specific attack system had been prepared as a lympho-reticular defensive line.

About Mineral Adjuvants

With a standard program of vaccination, multiple stimulation was standard for establishing the immune response to the target microorganisms.

However, the secondary type of reaction is certain that IgG class antibodies are induced. This IgG-class antibody should be required to test viral syndrome. In addition, a reduced hospital visit to each relevant.

From this point of view, it is referred to the special adjuvant for virus vaccines to induce IgA secretory antibodies.

Repeated Preparation of Mineral Adjuvant and Antigen induce IgG-rich Secondary Response, far from IgA-rich Response

Vaccination and immunization of antigen molecules, the vaccine gel are produced by antigen molecule, adjuvant. The adjuvant for experimental animals is specially produced by mixing mineral oil to make the liquid in soluble. The gel can be digested by the local macrophages/antigen presentation cell. We would like to discuss this text for human use, which requires a cooler way of preparing adjuvants. For this purpose, hemopoietic herbal decoctions are demonstrably increased by famous TCM [38,39], the lymphocytes and /or macrophages. We already reported that STD was one for macrophage-rich adjuvant (38) and BYT for lymphocytes one [39].

For the cool administration of vaccine material, preliminary oral administration of plant decoctions followed by real antigen administration by selected molecule of vaccine material. This type of approach can be successful for vaccinating humans in this modern century.

Proposal for Herbal Adjuvant System

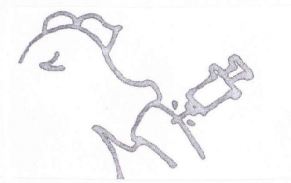
We conventionally immunized by foreign microorganisms via oral, respiratory and other dermal focus of circumstances. But laboratory immunologists, if they need prepare some antibodies, they prepare some special mixture that combines soluble antigen plus mineral oil as adjuvants. The purpose of mineral oil is to keep the mixture at the local injection site. However, this gel has caused sometime necrosis to the experimental animal. So this type of gel is absolutely not for human use. Instead, for prepare human vaccination, the cool system may propose for v humans, as well as, cattle and pets.

In this text we propose the special TCM for oral use before the administration of vaccine antigens. We have already reported suitable TCM for lymphocytes and macrophages as STD (38,39). According to Figure 1., these adjuvants are suitable to administer at least 7days before vaccination. A young generation [38] are recommended BYT and senile generation are recommended STD. The concepts are ruled out from the idea of Dr. ABO (39), where young generations are granulocyte-rich, on the other hand senile groups are lymphocyte rich constitution [40-42]. Table 1

	G-type individual		L-type individual	
	BYT		STD	
	Before	After	Before	After
Total WBC ($\times 10^3 \mu\text{l}$)	6.85	5.78	3.83	5.03
Lymphocyte (%)	23.1	26.9	43.3	38.1
Granulocyte (%)	69.9	64.4	50.6	56.8
Neutrophil (%)	65.8	61.7	45.3	51.0
Eosinophil (%)	1.7	2.8	2.5	4.6
Basophil (%)	0.8	0.6	0.8	0.9

Oral Adjuvant System

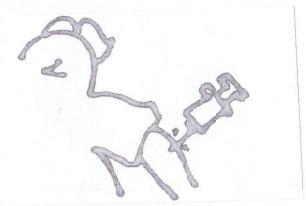
1) Conventional System



Immunization

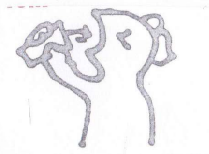


30 day — 360 days



Immunization

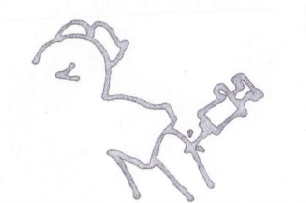
2) Oral Adjuvant System



Adjuvant



5 day — 10 days



Immunization

Selection of Suitable TCM as Adjuvant for Virus Vaccine

So as to induce secretory IgA plus secretory piece in the local mucosal membrane, Suitable TCM is necessary to select as adjuvant for virus vaccine. As pointed out in the section, two major TCM [38,39] are famous for increase and activate lymphoid cell, both granulocyte and lymphocyte. The prominent induction of viral vaccine composed with secretory IgA with secretory piece, it is necessary to preliminary confirmation is necessary employing at least by primate.

Immune response is associated with diseases Progress in viral infection

In the case of an acute viral infection in epidemics, the efficient virus-specific immune response is essential. A powerful reaction of helper T and cytotoxic T cells was generated to control and erase viral. viral-specific cytotoxic T cells show antiviral activity by producing IFN- γ and cytokine or directly killing the infected hepatocytes. B cells are co-stimulated by T cells and then produce antibodies against viral specific antigen. Virus infection refers to the extent and amount of antiviral immune response. Self-limited acute viral infection. CD16⁺ cells and CD16/56⁺ cells play an important role in the early control of the viral, and then a robust reaction of CD4⁺ T cells and CD8⁺ T cells is generated to control and eliminate viral. CD19⁺ cells, which are estimated by CD4⁺ T cells, produce anti-HBs, anti-HBe and anti-HBc. These protective antibodies remove viral antigens and viruses from the circulation and prevent or limit a viral infection. Chronic viral infection. Five stages are identified, including “immuno-tolerant” stage with high

replication of viral DNA and low-inflammation, “immune-active” stage with viral-specific cytotoxic T-cell reaction and antibody production leading to chronic liver injury, inflammation and liver regeneration, “immune inactive” stage with low replication of viral and limited inflammation, “immune reactive” stage with chronic hepatitis, HCC. The late stage of “immune exhaustion”. antigen (HBcAg) and viral nuclear antigen (HBcAg). These antibodies act to remove antigens and viruses from the circulation to prevent or limit virus reinfection. In addition, CD16⁺ cells and CD16/56⁺ cells efficiently control viral whose activities are achieved earlier than those of viral-specific T cells. In chronic viral infection, the early stage was described as “immune tolerant,” with high replication of viral DNA and low inflammation in childhood. The progressive loss of immune tolerance leads to the “immune” stage with viral-specific effector T cell reactions during puberty, leading to chronic liver injury, inflammation and liver regeneration. Patients can then enter an “immune-inactive” stage with low viral replication and limited inflammation. A small part of patients in the inactive carrier stage are exposed to a viral relapse, which shows a replicative viral representation and thus enters the “immune reactive” stage with chronic hepatitis, which transitions to liver fibrosis, cirrhosis and HCC. In the late phase, a number of oncogenic signaling pathways activated by viral lead to immune flight and promotes the eventually developing HCC. More recently, studies have shown that viral-immune-tolerant patients develop HCC, while treated “immune-active” patients develop HCC at a lower rate. Together with more cumulative immune-mediated hepatocyte damage would be more susceptible to sensitive groups.

Pathology of viral disease

Immune Response Related to Disease Progression during Viral Infection

In the case of a self-limited acute viral infection, the efficient viral immune response is essential. A strong reaction of the helper T and effector T cells was created to control and delete viral effector T cells, showing an antiviral activity by producing IFN- γ and TNF- α or by directly killing the infected hepatocytes. B cells are co-stimulated by T cells and then produce antibodies against viral surface antigen/viral infections related to the size and amount of the antiviral immune response. Self-limited acute viral infection. CD16 cells and CD 16/56 cells play an important role in the early control of the viral, and then a robust reaction of helper T cells and effector T cells is generated to control and eliminate viral. B cells, which are costed by T cells, produce anti-HBs, anti-HBe and anti-HBc. These protective antibodies remove viral antigens and viruses from the circulation and prevent or limit a viral infection. Chronic viral infection. Five stages are identified, including an “immuno-tolerant” stage with high replication of viral DNA and low inflammation, an “immune-specific” stage with viral-specific effector T cell response and antibody production leading to chronic liver injury, inflammation and liver regeneration, “immune inactive” stage with low replication of viral and limited inflammation, “immune reactive” stage with chronic hepatitis, passes over. Viral surface antigen and viral nuclear antigen. These antibodies act to remove antigens and viruses from the circulation, preventing or limiting virus reinfection. In addition, CD56 cells and CD16/56 cells efficiently go viral, whose activities are earlier than those of viral-specific T cells. In chronic viral infection, the early stage was described as “immune tolerant,” with high replication of viral DNA and low inflammation in childhood. The progressive loss of immune tolerance leads to the “immune” stage with viral-specific effector T cell reactions during puberty, leading to chronic liver injury, inflammation and liver regeneration. Patients can then enter an “immune-inactive” stage with low viral replication and limited to inflammation. In particular, part of patients in the inactive carrier stage are exposed to a viral relapse, which shows a replicate viral representation and thus enters the “immune reactive” stage with chronic hepatitis, which transitions to liver fibrosis, cirrhosis and HCC. In the late stage, a number of oncogenic signaling pathways that are activated by viral signals develop, immuno-tolerant patients develop HCC, while treated “immune-active” patients develop HCC at a lower rate. In particular, patients with more cumulative immune-mediated hepatocyte damage would be more acceptable to the host cell.

Reviewed Sample for Virus Vaccine

While the intake of the HPV vaccine in the first few years after approval reflected and continues to increase the intake of other vaccines for adolescents, the rate of increase began to be delayed within three years of the introduction, which led to the countless controversies and concerns that have arisen during this time. In addition, there

are still differences in coverage, with coverage between men being far regional and less coverage-wise. Nationwide, coverage for men and women ages 14 to 15 remains well target of 80% for healthy people, more than a decade. It is instructive to look at each of the factors that have put it on a trajectory, as opposed to that of the viral vaccine. Much of the logistical barrier to HPV vaccination could be overcome if a dose of the vaccine proves to be no worse than two. Currently, the combination of school entrance mandates and school-related vaccine administration programs would greatly facilitate access for adolescents in need of multiple doses, as would be the effect of the viral vaccine. Mandates also have economic benefits for individuals who could be expected to improve access in populations with the highest risk of HPV-associated cancers, as the vaccine entails high costs. Gender-neutral policies are called for to keep pace with rising absolute and relative rates of HPV-related cancers in men and would likely also encourage both women to normalize HPV vaccination by decoupling it from the culturally tense area of female sexuality in adolescents. The inclusion of men in government mandates can also help separate the vaccine from reports of autoimmune pathology and adverse effects on female fertility. Pharmaceutical companies and healthcare providers have the opportunity to convey a stronger gender-neutral message, and they are supported by research that identify the most successful means. While the global shortage of the HPV vaccine has recently led to calls to temporarily suspend gender-neutral vaccination efforts, alternative strategies for maintaining the supply of the vaccine, such as the suspension of vaccine Marketing to older cohorts, mitigating efforts to vaccinate men in the face of low national intake rates and the changing epidemiology of HPV-associated cancers. Finally, the younger age of vaccine administration, if approved, can also help to allay concerns about safety and news regarding adolescent sexual behavior. While gender-neutral mandates for mandatory HPV vaccination, coupled with improved access, would mitigate many of the factors that have limited intake, the same factors have led to any push by state legislators for the School entry almost eliminated. Vaccination requirements. Most public health boards have mechanisms in place to issue mandates, as has happened, and this could be a more durable way for this vaccine. Nevertheless, efforts to push for mandates for the HPV vaccine and future vaccines currently under development are likely to be increasingly supported by the perception of a landscape-saturated public health landscape with prescribed vaccines which is an ever-increasing burden on parents, children, children, and school administrators. The artificial vaccine came onto the market in a much different climate than the viral vaccine two decades earlier. The number of recommended vaccines had roughly doubled in the meantime. At the same time, the spread of vaccine protection advocates via the Internet and social media platforms around the world has contributed to the rise in vaccination hesitation. Vaccines that will be approved in the coming years will face similar struggles for support, given common characteristics of viral and viral vaccines in terms of transmission.

Pharmaceutical companies and proponents of these vaccines must be careful to ensure that the intervals between, recommendation and mandate proposals are used effectively to educate the public and healthcare providers, address access issues, and create more complete safety profiles after the mass implementation of vaccine programs. Explanation of the author's publication All authors certify that they meet the public criteria for authorship. At the same time, there is a reason for parents' rejection of the vaccine, which is "not necessary" for their child, and the reluctance of many prompt care providers to express their concern with parents, reflects the unease about the sexually transmitted nature of HPV infection. Almost immediately after the vaccine was approved, a moral dimension was prominent in the debates about its merits and the policies associated with it. Remarkably, anti-vaccination activists have prevailed in the past, both among politically liberal groups that focus on natural approaches to maintaining health, and among conservative groups that focus more on individual autonomy, but policy arrangements have been more drawn to the HPV vaccine and mandate proposals, with more conservative commentators rejecting mandates, often by focusing on parental autonomy on sexual health and education issues. Belonging to religious groups and more frequent worship visits have also been associated with the rejection of the HPV vaccine or the preference of the older age in vaccination. These political and religious associations can be seen as a reflection of perceived irreconcilability between HPV vaccination and messaging around abstinence and sexual permeability. The effects of these reservations, in turn, are amplified by the perception of suppliers of them, which, as there are, leads them to anticipate resistance and to recommend the vaccine less strongly than other vaccines.

Discussion

All creatures in the world, including humans, pose a risk of immunodeficiency in daily life. The factors that influence acquired immune activity are systemic metabolic disorders such as diabetes, malnutrition, extreme stress, senile and side effect due to cellular activity in cancer cells. So we have to choose a suitable menu every day to regulate immune function by leukocyte storage. The menu was summarized and listed as CAM: complementary and alternative medicine. One of the most important menu is TCM [33-37] in the Western medicine world, some trying to integrate Western Medicine and Eastern Medicine. We have tried to regulate the immune response by much ripe for fragile daily state of stress and so on. The main menu was acupuncture, hot water hydrotherapy, light exercise, etc. In this article, we want to highlight the regulatory mechanism of hot source hydrotherapy. The circumstance of balneotherapy with the effectiveness of hot spring hydrotherapy, with the exception of cases of contraindication, has been medically beneficial approved to be effective in many stress-related disorders and improving the dysfunction of biological rhythm disorder as well as chronic diseases. The mechanism of effects has been reported in many studies, but many things are still unclear. Repeated stimulation

can cause fatigue or regulation of the nervous system. Fatigue refers to the decrement of the reaction with repeated stimulation. The reports showed that the cutaneous mechanoreceptors in excitability as a result of repeated mechanical stimuli by sensitization refers to the reaction increments from novel, moderate heat stimulation, and it is the main phenomenon in the hypothalamus system. According to HSH [13-29] research, some of the volunteers reported to places on the body that were controlled by hearing, and they felt strong heat or heat during HSH, which spread around the stimulating location. Since the occurrence of this thermal sensitization reaction is often associated with obviously better therapeutic effects, HSH has often been used to treat various types of symptoms. Although the thermal sensitization reaction depends mainly on the selection of the sensitive for association with pathological condition, can also be a beneficial way to promote the effectiveness of hot source hydrotherapy.

Conclusion

This report suggested that the establish a better virus vaccine innovates from classic vaccine preparation.

1. Antibodies against the virus limited to prevent syndrome.
2. It depend on the immunoglobulin (Ig) class.
3. Repeated antigen stimulation induce secondary response that mounted by IgG antibodies.
4. Hemopoietic herbal decoction may play an adjuvant for induce viral vaccine.
5. Serum IgG attacks virus together with host cell that share the room in the host.
6. The immunoglobulin class A, IgA, with secretory piece, is the most important for the development of the newly developing viral vaccine.

Conflict of Interest

We declared none.

It depend on the immunoglobulin (Ig) class.

Repeated antigen stimulation induce secondary response that mounted by IgG antibodies.

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