Influenza and acellular pertussis vaccines not only fail to protect, they increase susceptibility and severity of disease upon infection – benefits are overrated and the risks are being ignored

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Abstract

The influenza vaccine fails often. The influenza vaccines cause the development of IgE mediated allergy to the influenza virus. The reason for failure include antigenic mismatch between vaccine strain and wild virus, IgE mediated antigen neutralization, etc. Naturally acquired immunity against influenza lasts for decades. Vaccine based immunity lasts for a few months. Replacing natural immunity with vaccine-based immunity, progressively increases susceptibility over time. In 2016-18, between 46 and 68% of patients admitted to the ICU for severe influenza were vaccinated with the influenza vaccine, in California. The influenza vaccine uptake in the general population in California during that same period was between 40-48%. This adds to evidence that not only does the influenza vaccine fail, it can contribute to increased disease severity. The increase in disease severity is due to patients suffering an allergic reaction against the virus, concurrent with the influenza infection.

The acellular pertussis vaccine (APV) fails to protect for more than a year in most patients, fails to provide mucosal immunity, fails to provide cell mediated immunity and fails to protect against airway colonization with *Bordetella pertussis* (BP) bacteria. Therefore the APV causes asymptomatic spreading of BP. The exact opposite effect of herd immunity - herd spreading. The APV causes IgE mediated sensitization directed against *BP* antigens. Therefore once colonized, continuing exposure to BP antigens results in asthma. Colonization with BP can cause multiple sclerosis. The APV contains cow's milk proteins used to manufacture the vaccine. The milk proteins include bovine casein, bovine insulin and bovine folate receptor proteins. The result is the development of milk allergy, type 1 diabetes and autism respectively. Colonization can induce immune tolerance to BP, making an infection even more dangerous and rendering the patient potentially unprotectable for life with a future pertussis vaccine.

Introduction

The influenza vaccine is marketed not because it provides an immediate benefit to the population but because it helps create and maintain a vaccine production infrastructure that will be needed for a pandemic. (1) But ironically, the influenza vaccine program makes a pandemic more likely and more deadly. This is because natural long term immunity acquired against seasonal influenza can protect parts of the population against the pandemic, as has been repeatedly observed. (2) With short term vaccine induced immunity replacing long term naturally acquired immunity, the entire population is vulnerable to the pandemic. (2)

While we often hear health authorities make claims that the benefits of vaccines outweigh the risks, there is very little science to support those claims. Vaccinologists admit that they do not understand the immunological mechanism by which vaccines provide or fail to provide protection. (3) Twenty years after the introduction of the acellular pertussis vaccine, we are making fundamental discoveries regarding its limitations. (4–6) Basically, the general population have become the guinea pigs for this acellular pertussis vaccine experiment.

Discussion

Influenza Vaccine

The influenza vaccine fails often. The influenza vaccines cause the development of IgE mediated allergy to the influenza virus. (2) The reason for failure include antigenic mismatch between vaccine strain and wild virus, IgE mediated antigen neutralization, wrong strain selected by the WHO, etc. Naturally acquired immunity against influenza lasts for decades. Vaccine based immunity lasts for a few months. Replacing natural immunity with vaccine-based immunity, progressively increases susceptibility over time. (2) In 2016-17, 68% of patients admitted to the ICU for severe influenza were vaccinated with the influenza vaccine, in California. (7) In 2017-18, it was 46%. (8) The influenza vaccine uptake in the general population in California during 2016-17 was 48% per the Centers for Disease Control (CDC). (9) In 2017-18 it was 40%. (10) The numbers tell us that vaccinated people have a higher chance of developing severe influenza needing admission to the ICU. This is as predicted (11) and adds to evidence that not only does the influenza vaccine fail, it can contribute to increased disease severity. The increase in disease severity is due to patients suffering an allergic reaction against the virus, concurrent with the influenza infection. (11) Even if one were to argue that ICU admissions include people with health conditions that have a higher vaccine uptake rate than the general population, the above numbers still indicate that the vaccine is unable to keep these patients out of the ICU. And many of these health conditions themselves are induced by vaccines (asthma (2,12), diabetes (13–17)).

Repeated influenza vaccine administration results in lower vaccine effectiveness due to IgE mediated antigen neutralization. (2,18)

Acellular Pertussis Vaccine

Many bacteria such as *Neisseria meningitidis, Streptococcus pyogenes* etc. are commensal bacteria that have co-evolved with humans for millions of years (19). They can colonize the mouth, gut or skin without usually producing disease. The human immune system has evolved a delicate balancing act tolerating these bacteria and attacking them if necessary.

Bordetella pertussis however, always infects unvaccinated humans and causes disease. The human immune system naturally attacks *B. pertussis* bacteria upon exposure. The robust immune response following natural infection provides long term natural immunity that also prevents colonization by *B. pertussis*. The route of natural *B. pertussis* exposure is through the airways. The acellular pertussis vaccines (APV), such as DtaP/TdaP, fundamentally alter *B. pertussis'* interaction with humans. The APV introduces the *B. pertussis* antigens through the skin instead, as an intramuscular injection. (20) This confuses the immune system. The APV also only contains a few pertussis antigens adsorbed on aluminum adjuvant. (20) The immune response to this artificial pertussis threat is completely different than the one towards a natural *B. pertussis* infection. The artificially induced immune response does not produce mucosal immunity. (21) It does not provide cell mediated immunity. (6) The artificial immune response causes an IgE mediated allergic response to *B. pertussis* antigens (22,23), with the immune system recognizing the bacterial proteins as worm proteins. (24) This is one of the consequences of using a Th2 (allergy) biased aluminum adjuvant. (25) The result is a complex, confused immune response.

Poor Protection

The APV fails to protect the vaccine recipient for more than a year in most patients. (26) As described above, the APV fails to provide mucosal immunity (21) or cell mediated immunity. (6)

Colonization and transmission

Due to the lack of mucosal immunity, there is no protection against airway colonization with *B. pertussis* bacteria even in individuals who are protected against symptomatic disease. (5) Such colonized individuals become disease reservoirs and can spread the bacteria. The APV therefore causes asymptomatic spreading of the *B. pertussis* bacteria. The exact opposite effect of herd immunity - herd spreading.

Vaccine induced partial immunity therefore enables *B. pertussis* to colonize human airways for the first time in millions years of evolution. This is uncharted territory. With *B. pertussis* colonization, the immune system can begin to build Treg mediated tolerance to the bacteria. Once it tolerates one epitope, linked epitope suppression causes tolerance to the entire antigen. (27) Such tolerance has at least two effects. Upon a subsequent full blown *B. pertussis* infection, it delays and weakens the body's immune response thus increasing disease severity. Future *B. pertussis* vaccines can be rendered ineffective as the immune system will not produce antibodies against antigens it has learned to tolerate. Recent reports confirm that the APV causes lifelong susceptibility to *B. pertussis* infection. (28,29)

Bacterial allergy and asthma

The APV causes IgE mediated sensitization directed against *B. pertussis* antigens. (22,23) In other words, you develop allergy to the *B. pertussis* bacteria. Therefore once colonized, continuing airway exposure to *B. pertussis* antigens triggers chronic allergic reaction in the airways, resulting in asthma.

Autoimmunity

With colonization, there is constant exposure to *B. pertussis* toxin which is an immune adjuvant. (21) Some *B. pertussis* antigens have molecular mimicry to human self antigens.(13,30,31) In the presence of *B. pertussis* toxin as adjuvant, this causes the induction of autoimmune diseases. (21)

Food allergy and autism

The APV contains cow’s milk proteins used to manufacture the vaccine. (32,33) The milk proteins include bovine casein, bovine insulin and bovine folate receptor proteins. Bovine casein results in the development of cow’s milk allergy. (34,35) Bovine insulin results in the development of type 1 diabetes. (16,36) Bovine folate receptor protein results in the development of autism, neural tube defects, hydrocephalus etc. (37)

Conclusion

Not only does the acellular pertussis vaccine have numerous safety problems detailed above, not only does it have poor effectiveness, even worse, it makes one susceptible to severe disease.

The current influenza and acellular pertussis vaccines need to be scrapped and work must begin on safe and effective alternatives. The universal influenza vaccines targeting non-variable viral components is not a useful strategy either, as previously described. (2)

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