Aeroallergen contamination of multi-dose and reconstituted vaccine vials cause the development of asthma, gastrointestinal diseases and proves vaccine makers and vaccine safety regulators are incompetent

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Abstract

Many vaccines are offered in multi-dose vials. When doses are drawn from such vials, they are contaminated with live and dead bacteria, viable and inactive viruses, viable and dead fungus and aeroallergens. They also were contaminated with latex from the latex vial stoppers. Thimerosal is used as a preservative in such vaccines to kill bacteria, fungus, and inactivate viruses. However, infection due to viable bacteria, fungi and viruses are not the only danger in contaminated vaccines. Immunization to proteins from dead pathogenic bacteria and viruses in vaccines may offer either a protective effect or cause diseases such as allergies or autoimmunity. Immunization against commensal bacteria, fungi, latex or aeroallergens are definitely harmful. They cause the development of inflammatory bowel diseases, gastroesophageal reflux disease, atopic dermatitis, seasonal allergies, latex allergy and allergic asthma. Similarly, many vaccines have to be reconstituted using diluents. A process that also introduces contaminants as in the multi-dose vial case. Vaccine recipients will develop immune responses against ALL these antigens. Immune responses against pathogens are unlikely to be protective because the immune response differs from natural exposure via a natural route of exposure. Such an altered immune response may even be harmful. Injecting proteins causing the development of allergies has been known for a hundred years following the Nobel Prize winning discovery by Dr. Charles Richet. The fact that thimerosal is used in vaccines is an acknowledgment of the occurrence of contamination. However, the fact that this mechanism of disease causation by non-target protein contamination of vaccines is not even discussed in the vaccine literature and the fact that vaccine makers and regulators have ignored this for decades, is proof of their incompetence. Multi-dose vaccines are more likely to be used in mass vaccination campaigns. Vaccination of health care workers are likely to use multi-dose vaccines. This can explain why health care workers have the highest rates of asthma.

Introduction

Clean rooms used for vaccine production are specified to permit thousands of dust particles per cubic meter. Single dose vaccines manufactured in such plants can be contaminated with aeroallergens as previously described. (1) Many vaccines are offered in multi-dose vials as well as single-dose formulations to optimize for cost. When doses are drawn from such multi-dose vials, they are again contaminated with bacteria, viruses, fungus and aeroallergens, but this time in an uncontrolled environment. Bacterial, viral, fungal contamination of such multi-dose vaccines are of course well known hence the use of thimerosal as a preservative in such vaccines. Thimerosal is used as a preservative to kill such bacteria, viruses and fungus and reduce growth during storage of the contaminated multi-dose vials. Similarly, many vaccines have to be reconstituted using diluents. A process that also introduces contaminants as in the multi-dose vial case. Pathogens are not the only contaminants. An aeroallergen particle the size of a bacterial cell, contains millions of proteins which all now become vaccine antigens. Puncturing latex vial

stoppers to draw doses, introduced latex particles into the vial. (2) This contributes to the epidemic of latex allergy. Manufacturers are now using non-latex based alternatives without admitting the devastation they have caused.
Multi-dose vaccines and reconstituted vaccines can therefore not only be contaminated at the manufacturing plant but also accumulate more contaminants again at the end-user site.
Many vaccines use an aluminum adjuvant that is Th2 biased (allergic response). (3) These contaminating antigens can be adsorbed on the surface of the adjuvant particles, making the undesirable immune response more potent.

Vaccine recipients will develop immune responses against ALL these antigens. The US Institute of Medicine (IOM, now known as the National Academy of Medicine), reviewed the entire literature from 1950 to 2011 and concluded that antigens in vaccines do cause the development of IgE mediated sensitization. (4–20) Such immune responses even against pathogens are unlikely to be protective because the immune response differs from natural exposure via a natural route of exposure. Such an altered immune response may be harmful. (1,21,22)

Discussion

Aeroallergens

Aeroallergen contamination of vaccines results in IgE mediated sensitization. Such IgE antibodies attach to the the surface of mast cells. Upon subsequent contact with the allergen, cross linking of antibodies triggers mast cell degranulation, releasing mediators such as histamine.

The natural role of IgE is defending against parasites and worms. IgE mediated reactions that include histamine release, itching, mucus production, etc., facilitate physical removal of worms or parasites.

Degranulation of nasal mucosal mast cells causes rhinitis and seasonal allergies. Degranulation of mast cells in the airways results in allergic asthma. Degranulation of mast cells in the stomach (23) releases histamine which in turn leads to increased production of stomach acid (24). This increased acid production is protection against ingested parasites and worms. When IgE on the surface of mast cells in the stomach are cross-linked by parasite antigens, the degranulation results in histamine release. The resulting stomach acid production kills the parasites or worms.

Aeroallergen containing vaccines program the immune system to recognize these aeroallergens as worm or parasite proteins. In other words, they induce the synthesis of IgE against aeroallergens. These IgE attach to the surface of mast cells. Water and food are contaminated with aeroallergens. Consuming food and water is therefore recognized by stomach mast cells as ingesting worms and parasites. The degranulation, histamine release and excess acid production as a defense against harmless aeroallergens, results in the epidemic of gastroesophageal reflux disease (GERD). By sensitizing the population using aeroallergen containing vaccines, we have created a multi-billion dollar market for blockbuster drugs such as histamine H2 blockers and proton pump inhibitors to reduce stomach acid production. Since this is a blunt approach, there may be too little stomach acid when it is really needed. Result, stomach acid reducing drugs increase the likelihood of gastrointestinal infections. Further, stomach acid reduction is known to result in nutrient malabsorption, contributing to numerous diseases such as Alzheimer’s (25) ,osteoporosis (26), and cancer (27). It is a devastating iatrogenic cascade.

Multi-dose vaccines are more likely to be used in mass vaccination campaigns. Vaccination of healthcare workers are likely to use multi-dose vaccines. This can explain why healthcare workers have the highest rates of asthma.(28)

Commensal bacteria

The human immune system has co-evolved for millions for years with exposure to commensal bacteria. It maintains a complex relationship that normally includes tolerance and attacking the bacteria when they cause damage. Contaminated vaccine induced immunization against commensal bacterial antigens, alters this delicate balance. Inappropriate immune response against commensal bacteria and fungi due to an aluminum adjuvant induced skewed response are definitely harmful. They cause the development of inflammatory bowel diseases (29) and atopic dermatitis. (30) Vaccine contamination with bacteria such as *E. coli* can cause an inappropriate immune response directed against *E. coli* antigens, thus resulting in diseases such as inflammatory bowel disease.(29)

The role of vacuum cleaners and leaf blowers

Vacuum cleaners reduce the overall quantity of dust. However, they also break up dust into finer particles due to powerful suction induced high velocity impact and then emit these fine particles. (31) Finer particles increase the probability and quantity of contamination in vaccines. Here of course we are interested in dust particles that contain proteins. Leaf blowers similarly produce fine dust particles due to high velocity impact and they also efficiently spread the particles in the air. Finer particles remain suspended in the air for a longer period of time.

Finer dust particles also penetrate deep into the lungs aggravating asthma both due to mechanical blockage and allergic reaction. (32)

Conclusion

Multi-dose vials and reconstitution of vaccines must be avoided. Injected vaccines may be a fundamentally flawed route of administration. Other safer routes of administration should be considered. The fact that this mechanism of disease causation by non-target protein contamination (aeroallergen, bacterial, fungal, viral protein) of multi-dose vaccines is not even discussed in the vaccine literature and that vaccine makers and regulators have ignored this for decades, is proof of their incompetence. We need fundamental changes in vaccine safety regulatory structures to address these problems.

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