

PEDIATRIC HEALTH

# Vaccines & Autism (Part 3)

David Seaman, DC, MS, DABCN | DIGITAL EXCLUSIVE

In part 1 of this series [August 2018], I mentioned that I have not witnessed a child regress into an autistic state after being vaccinated.

This holds true today; however, I recently spoke with a friend from college who distinctly witnessed his child's behavior change immediately after being vaccinated. His story was similar to those described by parents on the various documentaries that the vaccine authoritarians immediately discard as propaganda.

Fortunately for my friend, the regression was not incapacitating and the child remains functional, despite the persistence of the behavioral changes that occurred immediately post-vaccination.

While vaccine injury is certainly not the rule, it appears to be a legitimate outlier event that should not be ignored, particularly in the fashion demonstrated by the authoritarians. It appears that their denial of vaccine injury serves to fan the flames of emotion associated with autism expression.

Such denial also demonstrates a fundamental lack of knowledge regarding disease expression, such as cancer and autoimmune disease. This is important because the emerging evidence suggests autism is a type of autoimmune expression.<sup>1-7</sup>

Understanding the Autism-Prone Phenotype: The Red Meat - Colon Cancer Example

The topic of meat-eating is emotional, but less so compared to autism, and can serve as an example for understanding the autism-prone phenotype. Unfortunately, people actually believe meat causes colon cancer and therefore, suggest no one should eat meat. In fact, the red meat – colon cancer relationship is far more complicated.

A study in 2001 demonstrated there was an increased risk of developing colon cancer if one ate well-done red meat, was a smoker, and had a rapid phenotype for both N-acetyltransferase 2 (NAT2) and CYP1A2.<sup>8</sup> Non-smokers had no risk whatsoever, and there was no increased risk even in smokers if they did not eat well-done red meat. Smokers also did not have an increased risk so long as they had a slow phenotype for NAT2 and CYP1A2.

It is interesting that this study and similar ones never get any attention during the debate about the alleged associations between eating meat and disease expression. Similar is the debate with autism, which typically focuses on vaccines as the cause – a monocausal mechanism promoted by the radicals and denied by the authoritarians.

Infections and Autoimmunity

In 2000, an article outlined the factors associated with the expression of rheumatoid arthritis, which included genes, infections, stress system activation and excess production of female hormones. Infections "stimulate/activate" the immune system and autoimmunity represents a chronic state of immune activation. Despite multiple studies that have outlined these causes of autoimmune expression, the standard treatment remains steroids and biologics.

For comparison, the expression of autoimmunity (rheumatoid arthritis) in an adult may occur after an infectious event that activates the immune system, while in a child, the immune-activating event may be an infection – or a vaccine.

Interestingly, the pro-inflammatory body chemistry of an adult with an autoimmune disease is similar to a child with autism, which suggests we should operationally view autism as a type of autoimmune disease. <sup>1-7</sup> Not surprisingly, there is an increased rate of autism expression in the offspring of parents with autoimmune diseases. <sup>7</sup>

## Obesity and the Autoimmune Profile

The adipose tissue mass of lean individuals contains immune cells that are anti-inflammatory. As one moves toward obesity, anti-inflammatory immune cells are replaced with pro-inflammatory immune cells, including M1 macrophages, Th1 cells and cytotoxic T cells. Not surprisingly, obese mothers are more likely to give birth to children who are more susceptible to developing autism and other neurodevelopmental disorders. 10-11

## The Autism-Prone Phenotype

The meat-disease and infections-autoimmunity scenarios described above are similar for the expression of most diseases including autism. The problem is that comprehending the chemistry of multiple variables can be confusing, and I certainly do not claim to understand them all.

However, the greater problem appears to be the complete denial of phenotype variability by the authoritarians in particular, but also by the radicals who go out of their way to blame aluminum or mercury – the one-cause scenario, which is no different than blaming red meat for causing colon cancer or subluxation as the "one cause."

While there are likely more predisposing factors, these are the ones I have identified as participating in the expression of the autism-prone phenotype, which I outlined and referenced in part 2 of this three-part series:

- Maternal inflammation
- Neuroinflammation
- Mitochondrial disorders
- Methylation issues
- Antioxidant imbalances
- Digestive inflammation
- Vitamin D deficiency
- Excess brain arachidonic acid

Maternal inflammation can be an autoimmune disease or obesity; or obesity with an autoimmune

disease. Any one of the three places her offspring at greater risk for developing autism, because the outcome of maternal inflammation is the associated neuroinflammation of the fetus.<sup>12</sup>

A child born with dysfunctional mitochondria or less efficient methylation and antioxidant metabolism will be at additional risk. Thereafter, feeding a child sugar, flour and refined oil calories that are salted can lead to digestive inflammation and excess brain levels of arachidonic acid, both of which increase risk of developing autism.

If the child is born from a mother deficient in vitamin D and is also kept out of the sun, this will increase risk, as vitamin D deficiency is known to create an autoimmune profile.<sup>13</sup>

While not listed above, both celiac disease and atypical celiac disease, which includes nervous system diseases such as chronic inflammatory demyelinating polyneuropathy, multiple sclerosis and schizophrenia, are associated with an autoimmune profile. In other words, gluten consumption by these patients leads to the development of autoimmune chemistry expression, <sup>14</sup> which makes gluten avoidance a reasonable option to consider.

### Dealing With Autism Chemistry

Autism chemistry is operationally identical to the inflammatory chemistry associated with obesity and most chronic diseases. Thus, in my opinion, we should stop making mercury and aluminum the focus and view them as additional sources of potential inflammation, keeping in mind that their relationship to autism appears weak and not consistent with the history of autism expression.<sup>15-16</sup>

The focus for reducing autism chemistry should be on parental health prior to, during and after conception. This means parents need to identify and reduce all inflammatory markers. After the child is born, parents should create an anti-inflammatory lifestyle for the child, ensuring in particular, adequate omega-3 and vitamin D status in addition to avoiding all pro-inflammatory calories, including gluten, to support a normal systemic and gut biochemistry.

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