

Dear Dr. Novella,

Your assertion that the scientific question of Autism etiology belongs to the medical community rather than Hollywood Stars is correct. I also agree that Hollywood opinions are more likely to be broadcast to millions because of their position in the media. This heightened awareness is nothing but a positive thing for the million families struggling with this difficult, and all too common, disorder. Jenny McCarthy is an Autism Mom looking for answers and rattling some cages—good for her. Amanda Peet is a new mom who believes in the importance of vaccines to protect her baby—good for her too. Don't attack the moms, listen to them.

These issues are very complex as we exchanged before and not amenable to soundbites. Regarding your entry on Hannah's case, your blog entry unfortunately propagates several of the mistakes from the media.

In criticizing the journalism of Mr. David Kirby, you wrote:

“He refers again to the Hannah Poling case, a girl with a mitochondrial disorder who developed a neurodegenerative disorder with “features of autism” after getting a fever from vaccines.”

Actually—Hannah has diagnoses of DSM-IV Autism (by JHU/KKI psychology) and mitochondrial disorder (by two metabolic experts). The only ‘degeneration’ that occurred (along with 6mos of total growth failure) after 18mos of NORMAL development followed vaccination and nothing else! Of course, any ‘scientist’ can obviously point out that temporal correlation in a single case never proves causation. Rule number one of pediatrics though is “LISTEN TO THE MOM.” Are 10s of thousands of autism moms over the last decade suffering from mass hysteria induced by Hollywood? Not likely.

You also noted:

“This special case - which is not a case of autism being caused by toxins in vaccines - says nothing about the broader vaccine-autism debate.”

The only thing unique about my little girl's case is the level of medical documentation—5 to 20% of patients with ASDs have mitochondrial dysfunction. Many other cases where mitochondrial testing is WNL is because "we never looked" not because the testing would be "within normal limits." Most mitochondrial experts will tell you that the dots of autism and mitochondrial disorders are strongly connected.

Finally, you say:

“The case was settled (not judged in Poling's favor, but settled) because both sides realized it was a special case that could not be extrapolated to other vaccine-autism cases.”

The case was not settled, it was conceded by medical representatives of Sec HHS. We are obviously pleased with the HHS decision to concede our case, but we had NOTHING to do with the concession. This was a unilateral decision from HHS (recall that HHS is the respondent,

rather than the vaccine maker, as manufacturers have blanket liability protection afforded by the Vaccine Injury Program established in 1986) I will not speculate on the obvious question—why concede? Hannah’s case was positioned to set precedent as a test case in the Omnibus Autism Proceedings for potentially thousands of other cases.

With regard to the science of Autism, I have no argument with the assertion that a single case does not prove causation of a generalized autism-vaccine link. What the case does illustrate though is a more subtle point that many physicians cannot or do not want to comprehend (ostensibly because vaccines are too important to even question). Autism is a heterogeneous disorder defined by behavioral criteria and having multiple causes. Epidemiological studies which have not found a link between autism and aspects of vaccination do not consider the concept of autism subgroups. Indeed, in a heterogeneous disorder like Autism, subgroups may indeed be ‘vaccine-injured’ but the effect is diluted out in the larger population (improperly powered study due to inability to calculate effect size with unknown susceptible subpopulation). I think former NIH Director, Dr. Bernadine Healey explained it best in that population epidemiology studies are not “granular” enough to rule-out a susceptible subgroup.

Furthermore, ‘science’ has not systematically studied the children who fell ill following vaccination to determine what the cause(s) for their adverse reaction was. It would follow that if you never tried to understand why a single child developed encephalopathy following vaccination—you wouldn’t have the first clue as to what aspects of vaccination you could alter which could increase the relative risk of that adverse event (whether it be thimerosal, live virus, or ‘too many’). Could the susceptibility be a mitochondrial genetic haplogroup similar to Chloramphenicol toxicity—sure it could! Why did a few Alzheimer’s patients die of fatal encephalitis following administration of the failed AN-1792 vaccine, but the majority had no ill effects (vaccine didn’t work though)?

Definition: Autism is a heterogeneous systemic disorder with primary neuropsychiatric manifestations due to complex genetic and gene-environmental interactions likely affecting synaptic plasticity early in childhood development. This new theory of Autism is rapidly replacing the ‘old guard’ dictum that Autism is a genetically predetermined developmental brain disorder of synaptic formation/pruning that is set in motion prenatally. By the ‘10 year rule of science,’ your time is about up!

Until the biological basis of ASD subgroups are better understood, further epidemiological and genetic studies regarding “Autism” causation will be relatively meaningless. We need good science to be able to address these complex issues which parallel nicely the emerging story of genetic and environmental influences in Parkinson’s disease. Perhaps some Parkinson’s researchers want to take a crack at Autism?

Recommended SCIENCE reading for the evening:

Altered calcium homeostasis in autism-spectrum disorders: evidence from biochemical and genetic studies of the mitochondrial aspartate/glutamate carrier AGC1. *Mol Psychiatry* 2008 Jul 8. (The discussion includes thimerosal as a potential toxin that could trigger further

perturbations of calcium homeostasis leading to neuronal injury—and in a mainstream Nature publication no less)

Thank-you Dr. Novella and his band of skeptics for continuing the debate.

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