

## Autism – another topic often lacking facts when discussed within the chiropractic profession



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Psychiatrist Leo Kanner first described autism for us in 1943. His was an observation of a small group of children who showed total indifference to other people and extreme aloofness. These children made very little eye contact and were noted to have severe language deficits associated with their apparent lack of desire to communicate. The way in which these children interacted with their environment was very unusual when compared with other children, especially in the fact that they showed no pre-

tend or imaginative play.<sup>1</sup> Infantile Autism first appeared as a term in the *Diagnostic and Statistical Manual of Mental Disorders (DSM), Third Edition.*<sup>2</sup>

In the intervening years, that which we now call autism has undergone a significant broadening of its definition. The *DSM-IV*, in fact, now refers to an Austistic Spectrum of Disorders which includes autistic disorder itself, as well as pervasive developmental disorder-not otherwise specified (PDD-NOS), Asperger syndrome, Rett syndrome, and childhood disintegrative disorder.<sup>3</sup>

Much has been made in the past several years over the increasing incidence – or perhaps the apparent increasing incidence – of pervasive developmental disorders. There are those that would like to blame the Measles-Mumps and Rubella (MMR) vaccine.<sup>4-6</sup> Despite the impressive lack of evidence in support of this supposition and the large amount of evidence against it, this theory continues to be trumpeted by the National Vaccination Information Center (NVIC) and other anti-vaccination advocates, including many chiropractors, chiropractic entrepreneurs, and even some chiropractic organizations.<sup>7</sup> One recent Canadian chiropractic article by Roger Turner even went so far as to declare that “Chiropractors should be considered the primary contact for the treatment of autism, PDD, ADD, ADHD, and learning difficulties, because they know the answer to the question, Why do only certain children develop autism while 99.5 per cent of the children vaccinated do not.”<sup>8</sup> The article purports that the causative factors needed for the MMR to cause an autistic type reaction are a decreased ability of the immune system to handle stressors, mercury toxicity from parents’ amalgam fillings, a pre-existing yeast infection in the mom transferred to the child, food allergies and, of course, the requisite misalignments of the spine and skull.

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I have no ties to any chiropractic, medical or pharmaceutical concerns.

Chiropractors as the primary contact for the treatment of autism. Does that scare anyone besides me?

The diagnosis of autism in a child is nothing short of a tragedy and, of course, wherever there is a tragedy, there must be someone to blame. The trial lawyers have taught us this. Several studies have been undertaken to find out just who or what is to blame for autism. Vaccinations make a handy target – after all, they’re produced by pharmaceutical companies, an industry not always known for its perfection in matters of corporate ethics. Plus, they tend to have deep pockets – and trial lawyers have taught us that those with deep pockets are often culpable. Or can be made to look so. Aside from Wakefield,<sup>4,9</sup> however, no study has ever been published to implicate the vaccine. Several, however, have been published that vindicate the vaccine.

### **An examination of the evidence**

Wakefield’s first paper in 1998<sup>4</sup> forwarded the hypothesis that the MMR vaccine causes a series of events that include intestinal inflammation, loss of the intestinal barrier function with resultant entrance into the bloodstream of encephalopathic proteins and then consequent development of autism. In support of this hypothesis, Dr. Wakefield described the cases of twelve children with neurodevelopment delay, only eight of whom were diagnosed with actual autism. All twelve children had presented with gastrointestinal complaints and developed autism within one month of receiving MMR. At the time the paper was written, MMR was experiencing approximately a 90% compliance rate in the United Kingdom. Because autism is generally first diagnosed at roughly the same age at which MMR is given, the two would naturally have a casual concordance, just as was seen with the Diphtheria Pertussis and Tetanus Toxoid vaccine (DPT) and Sudden Infant Death Syndrome (SIDS). Given this, the incidence of autism in vaccinated vs unvaccinated children would have been a critical piece of information. Wakefield chose not to include this information in his study.

That critical omission then led Brent Taylor to publish his paper in 1999.<sup>10</sup> Taylor et al. studied the relationship of the MMR vaccine and the development of autism by examining the records of 498 children with autism or autism-like disorder as identified by registers from the North Thames region of England before and after the MMR vaccine was introduced into the UK in 1988. They

then examined the incidence and age at diagnosis of autism in vaccinated and unvaccinated children. They found that the percentage of children vaccinated was the same in both groups, and that there was no difference in the age of diagnosis of autism in vaccinated and unvaccinated children.

Wakefield’s original paper also blamed intestinal inflammation as leading to a “leaky gut” which then led to the autism. His own paper, however, reported that eight of the children had symptoms of autism long before they developed gastrointestinal symptoms.

Despite its glaring flaws, merely the suggestion that a common vaccine given for the public good could be causing harm was enough to send a near-panic through the medical profession. After all, *primum non nocere*.

It was 2001 before we had what many considered a definitive article to help put this issue to rest. Nathalie Smith and her group examined the relationship between the increasing number of autism cases in California and the use of the MMR vaccine. They compared the percentage of children immunized with MMR between 1980 and 1994 and the incidence of autism during that same period. Although there was a dramatic increase in the incidence of autism (370%), the percentage of children receiving MMR was relatively stable with only a 14% increase.<sup>11</sup> A paper with similar findings in England followed shortly thereafter.<sup>12</sup> Taylor then went a step further with his second paper on the controversy, looking into what Wakefield by this point was calling “a new variant autism.”<sup>7</sup> Taylor compared the number of children with autism and intestinal symptoms before 1988 (when the MMR was instituted in England) and after 1988. They found no difference and concluded, therefore, that no evidence existed for such a “new variant autism.”<sup>13</sup>

Just last year, Madsen et al. published what is probably the best designed study yet looking at MMR as a possible cause of autism.<sup>14</sup> They conducted a retrospective cohort study of all children born in Denmark from 1991 through 1998. After adjustment for potential confounders, the relative risk of autistic disorder in the vaccinated group as compared with the unvaccinated group was 0.92 (95% confidence interval, 0.68–1.24) and the relative risk of autistic-spectrum disorder was 0.83 (95% confidence interval 0.65–1.07). So it would seem that, if anything, the MMR vaccination might be protective against autism and autistic-spectrum disorder.

### **So why is the incidence of autism increasing so dramatically?**

Several theories have been forwarded on this topic, most with good evidence. First, the diagnosis was broadened significantly in the DSM-IV as opposed to DSM-III. Therefore, many children who, before 1994, would have fallen outside the diagnostic range now rather suddenly find themselves deserving of a diagnosis. Many of these children are high functioning. As I noted in my previous commentary,<sup>15</sup> we all knew many of these children growing up. They were the ones that were “loners” and preferred to sit on the corner of the playground at recess, spinning the tires on their Matchbox cars rather than interacting with other children.

Our understanding of developmental disorders is now much, much better than it was even ten or twenty years ago. Pediatricians are no longer satisfied with diagnosing a child as “a little off.” Parents are much less stigmatized by labels and much more willing to report odd symptoms to their physicians and not simply try and hide a child’s “differences.” Teachers and educational workers as a whole are also much more attuned to looking for the subtle clues that might signal a developmental or social disorder.<sup>16</sup> A great deal of the credit for autism’s increased awareness can be given to Doug Flutie who, as a star quarterback, founded an autism educational foundation when his son was diagnosed.

### **So what does cause autism?**

If only we knew. The most compelling studies seem to implicate genetics. Using the strict definition of autism, there seems to be a 60% concordance between monozygotic twins and 0% concordance between dizygotic twins. Using the wider definition of the autistic-spectrum disorders, there seems to be a 92% concordance with monozygotic twins and a 10% concordance between dizygotic twins.<sup>17,18</sup>

Press releases out of the NIH also suggest that there seem to be similar gene abnormalities among autistic children that aren’t found in the general population.<sup>19</sup>

### **It goes to credibility, your honor**

The bottom line is that there is still a great deal to be learned about autism and its etiology or etiologies. Wakefield’s initial paper, while heavily flawed, did raise a legitimate safety concern, which did deserve to be looked

into. It has been looked into, nearly *ad nauseum*, and the conclusions over and over again continue to be – we don’t know what’s causing it. But it isn’t MMR.

When chiropractors and chiropractic organizations persevere on this issue, they chip away at our credibility as a profession. Measles, mumps and rubella are ugly diseases – few today appreciate just how ugly they are because we almost never see them, and we almost never see them because of the MMR vaccine. Remember: *primum non nocere*. First, do no harm. Recommending that a parent carefully consider the pros and cons of vaccination is proper standard of care. Making recommendations beyond that, unless one truly knows the facts and not just the anti-vaccination litany, is reckless. Urging parents to lie or to break the laws to avoid vaccination<sup>20</sup> just because that’s the dogma BJ Palmer left us with is nothing more than insulting.

The idea of poisoning healthy people with vaccine virus ... is irrational. People make a great ado if exposed to a contagious disease, but they submit to being inoculated with rotten pus, which, if it takes, is warranted to give them a disease<sup>21</sup>

BJ was wrong about other things, too. We, as a profession, need to stop paying such overblown homage to a dead Davenport grocer and his megalomaniac son. We need to wake up and smell the data. Otherwise, the world will leave us behind where we will, rightfully, belong.

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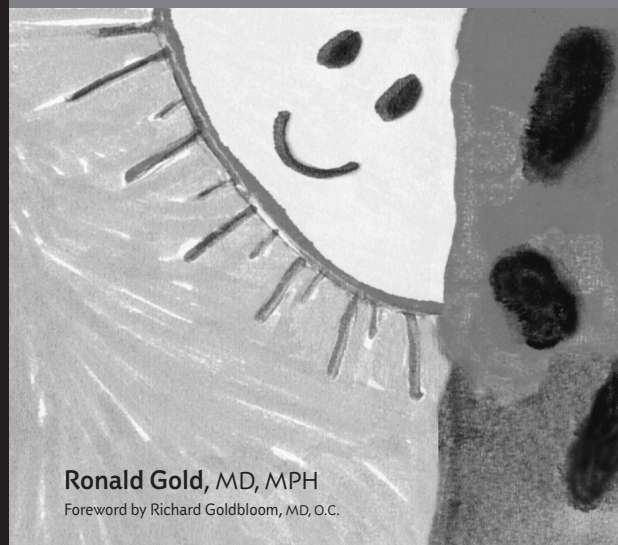
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