

## Understanding Functional Disconnection Syndrome

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Most of the information in this article is taken primarily from the work of one of our neuromates, Dr. Robert Melillo, who has just published a book titled *Disconnected Kids: The Groundbreaking Brain Balance Program for Children With Autism, ADHD, Dyslexia, and Other Neurological Disorders*. I had the good fortune to study with Dr. Melillo in 2003 and have been implementing his program with good results since that time. For the sake of all the suffering children (and parents) out there, I urge you to start on the path to understanding the powerful effect we can have on these children's brains.

I remember seeing the movie "Rain Man" years ago and wondering about the interesting and strange condition known as autism. In the past 30 years or so, there has been a veritable explosion in the rates of autism and its related comorbidities around the world. Autism was originally diagnosed as **one in every 10,000 births**; it is now **one in every 150**. This is a staggering statistic.

True, it is possible we are more sensitive to the condition, and thus greater awareness has led to a greater level of diagnosis. Still, I have had dozens of patients who have been diagnosed at all different points along the autistic spectrum. There has definitely been some change that must account for this. Maybe it is the controversy surrounding the **MMR vaccine**. Numerous studies have ruled out a connection, but before you jump down my throat, understand that I have seen many cases in which the parents noticed their child change following vaccination. Whether this can be termed coincidental or consequential still remains to be seen. Perhaps it is lack of exercise or insufficiency/toxicity of the modern food system (casein and gluten sensitivities), or a simple deficiency of DHA (I have seen great responses when a good omega-3 oil is mega-dosed).

Regardless of the cause and all the statistics, at some point there will be an autistic child in your office who needs your expertise and care. Dr. Melillo's program provides a directed approach to these children's brains, allowing us to deliver an effect that is specific and powerful. The concept behind functional disconnection syndrome is this: There is essentially a breakdown in the ability of the right and left brains to connect and talk to each other. Again, there can be many reasons behind this, but genetically, we all have different levels of brain function. This, of course, accounts for one person being great at music whereas someone else may be great at sports. We all have genetically driven strengths and weaknesses; this is the power and gift of our own individuality.

Within that individuality, there is also a given ability to allow communication between the two hemispheres. What may occur in these children is that we see a greater breakdown in communication of the two hemispheres, to the point that we can see a dominance of one hemisphere over the other; in other words, a *functional disconnection*.

The right and left hemispheres, although anatomically similar in appearance, are vastly different in terms of function. We know, for example, that most people, including left-handed individuals, have the speech centers on the left side of the brain. The right brain is our social brain and the left brain is our clinical brain. The great majority of these autistic cases are right-brain disorders or

deficiencies. Due to the fact that the right brain is the social brain, we can begin to understand how these children will withdraw themselves from those around them, choose not to maintain eye contact, and resist the most basic, loving touch of a parent or sibling. If the deficiency of the right brain is such that the left brain becomes super-dominant, these children may begin to show savant abilities, such as amazing memories, perfect pitch or mathematical prowess.

The primary premise of chiropractic neurology, and the reason I am writing these articles, is to convey the potential power that we possess through neuroplasticity. We literally have the ability to change the nervous system directly and profoundly with a great chiropractic adjustment. This is the complexity and the importance of knowledge; indeed, it is the responsibility of that knowledge. If I adjust an autistic child on their right side, this drives afferent barrage into the right cerebellum and left cortex. This then stimulates cortical cells already firing at a high level to promote greater genetic expression and greater protein replication, such that it can reinforce or create new dendritic connections in the left hemisphere. I may very well have worsened the child's condition and made it that much harder for them to ever improve.

If, however, I do that same adjustment on the left side, the probability of central changes are such that it may get that child's brain to begin communication with the left brain and, lo and behold, have them utter their first words to stunned and overwhelmed parents. This has happened in my office on more than one occasion (though, of course, it is by no means a common occurrence). Such a little difference in the side of the treatment, but such a potentially huge difference in response.

There is no possible way I could cover all the information necessary to make you proficient at evaluating these cases in a 1,000 word article. I encourage you to learn more about your potential to help children with functional disconnection syndrome using chiropractic. For now, take away this pearl for your practice: adjusting the left side of the spine (and only the left side) in a coupled manner in an autistic child may yield great benefit. We may be the answer the whole world has been looking for.

JULY 2009