

Integrative Manual Therapy for Autism

Recovery from Autism is becoming more and more a reality. But with every child's story of recovery, there is a long road leading to this point. Having worked with many families of children with Autism Spectrum Disorder (ASD), one of the most common themes amongst these children's stories is the multi-disciplinary approach that they follow. Many of these programs include ABA (Applied Behavioral Analysis) therapy in school and at home, Sensory Integration, IV nutrition and chelation, elimination diets such as a gluten and casein free diet, Homeopathy, Hyperbaric Oxygen, and much more. Every child with Autism is different—their history, their age of onset, their behavioral presentation, their level of health, and more. This leads to a greater diversity in treatment programs. One child may present with high levels of mercury in their body. Another child may undergo testing showing high levels of yeast. Each test leads to a different treatment, all of which may be valuable. With all of our studies we have found that a comprehensive program leads to the greatest recovery.

Integrative Manual Therapy

Integrative Manual Therapy (IMT) is a hands-on approach to treatment of pain, disability, and disease. Developed by Dr. Sharon (Weiselfish) Giammatteo over the past 30 years, IMT is a new approach to health care developed to address the needs of complex patients. IMT practitioners identify and address the underlying causes of dysfunction using a comprehensive and holistic approach. While IMT diagnostics and treatment modalities are predominantly hands-on, IMT also integrates a wide range of diagnostic and treatment technologies, and nutritional programs (i.e. natural supplements, diet, and herbs) to develop a customized solution for an individual patient's needs.

IMT treatment techniques are manual (hands-on), and generally involve gentle manipulative techniques to promote tissue repair, normalize structure and restore function. Unique to IMT is the integration of manual therapy techniques for all systems in the body (i.e. bone, nerve, fascia,



muscle, organ, lymph and circulatory systems). As each tissue type in the body has unique requirements for healing, tissue specific techniques are used to yield optimal results. Often, multiple systems are addressed to facilitate recovery, as a dysfunction in one system may influence or be influenced by a problem in another system. To illustrate, consider a patient with chronic shoulder pain. Upon being assessed, to determine which structures were contributing to their pain and/or dysfunction, treatment would ensue for the affected systems. As determined by the diagnostic findings, this may include treatment for muscles, fascia, joints, bones, nerves, circulatory vessels, lymphatic structures and/or organs. The order in which the involved systems would be treated would be determined by the diagnostic findings. Ultimately, IMT is the integration of techniques to assess and address all systems in the body.

Integrative Manual Therapy: Structural versus Functional Rehabilitation

IMT falls into the category of structural rehabilitation whereas other types of therapies may be categorized as functional re-

habilitation. A helpful analogy to illustrate the difference between structural and functional therapies is to imagine a child sitting in front of a piano. Let's assume for this example, that the child does not know how to play the piano. If we teach the child how to play the piano, then the music should sound great. But what if the piano was out of tune or even broken? No amount of piano lessons would lead to great music because the piano does not have the potential for good sounding music. However, if the approach was to fix the piano and then teach the child how to play, then the music has the potential of sounding wonderful. In this scenario, teaching the child how to play the piano is considered functional rehabilitation. Fixing the piano illustrates structural rehabilitation.

The simplest way to explain IMT is to use an orthopedic example such as a frozen shoulder. In this example, a functional approach would include strengthening and stabilization exercises as well as stretching. If the shoulder had structural dysfunction which is commonly the case with frozen shoulder, such as a compressed joint or a bone bruise on the joint surface, using a functional approach would cause stress on the joint and ultimately be unsuccessful in reducing symptoms and increasing function of the shoulder. However, beginning treatment with a structural approach such as IMT to correct the structural dysfunction such as decompressing the joint would create a potential for function. At this point, it would be more beneficial to introduce the functional exercise program. When utilized in this way, the results appear to be more sustainable.

In the field of IMT and structural rehabilitation, performing a thorough assessment is important to discover underlying problems in the body that very likely are contributing to the person's functional challenges.

Integrative Manual Therapy for Autism

No one would question that Autism is more complex than a frozen shoulder. But why? Firstly, no two children with Autism are alike. Secondly, Autism involves mul-

multiple body systems. If we were to consider the concept of structural and functional therapies for treatment of Autism, it is important to note here that they are both very important for recovery.

Although there is such diversity among etiologies between children that have Autism, they share similar behaviors which led to the diagnosis. Let's review some common Autism Spectrum Disorder behaviors:

1. Self-stimulatory behavior such as rocking, gyrating, waving of hands
2. Limited eye contact
3. Hypersensitivity to sound evidenced by covering of ears
4. Visual and auditory processing deficits
5. Aggressive behaviors

Example: Hypersensitivity to Sound

Let's examine some of these behaviors to further illustrate the difference between structural and functional therapies. Let's begin with hypersensitivity to sound. It is common knowledge that many children with Autism have a history of recurrent ear infections and allergies. In the field of IMT there are many patterns of dysfunction that have been identified in the body. The discovery of these patterns has led to the development of many treatment protocols.

One commonly found pattern in children with Autism is severe compression of the inner ear. Within the inner ear, there are multiple important structures for hearing, including the cochlea, ear drum, vestibular nerve, and more. When combined into the vestibular mechanism, these structures are not much larger than a peanut. They reside inside the ear, bordering up to the temporal bone. When there is severe compression, this peanut sized vestibular mechanism within the inner ear pushes up against the temporal bone. This can contribute to significant hypersensitivity to sound. Often, the child may have headaches, and very likely does not have the ability to express them. Much of their behaviors may be secondary to this dysfunction.

A functional approach to addressing the hypersensitivity to sound may be a form of music therapy or Auditory Integration Therapy (AIT). This approach can be very successful when used at the appropriate time. But if there is severe compression of the inner ear, the benefits of AIT are limited. However, if IMT as a structural therapy is utilized first to help decompress the inner ear using a wide array of techniques, then the functional therapies have a greater potential to work. Often, the IMT alone can help to

reduce and even correct the hypersensitivity to sound. But in the more severe cases, the functional therapies are very important to support the re-education of the region.

Example: Aggressive Behaviors

When considering aggressive behaviors, the solution may seem more complex for a number of reasons. Firstly, because the child is aggressive, it may be challenging to work with them. Secondly, aggressive behaviors stem from a very specific part of the brain, the limbic system. The limbic system is the core part of our brain—the part of the brain that we share with animals—the reptilian brain. This is the part of our brain associated with survival mode and rage response. When the limbic system is in a state of dysfunction, there is a range of behaviors that may surface, including aggressive behaviors such as self-injurious behavior as well as aggression to others, obsessive compulsive behaviors, and more. IMT is a wonderful tool to treat the limbic system when it is in a state of dysfunction.

A common functional approach to treatment of these behaviors is ABA therapy or some type of behavioral modification. The challenge with these functional approaches is that the aggressive behaviors are reflexive—there is no voluntary thought process involved. Consider the example of a lion that has been shot, but not killed. It wants to destroy everyone and everything in its path. The lion is not thinking about consequences. Similarly, the child with Autism that lashes out is not thinking about consequences. They are purely acting on a reflex from their limbic system. Whereas ABA therapy can be very effective in helping to develop normal behaviors through repetition and role modeling, aggressive behaviors are rarely reduced with this approach. But when used in combination with IMT, there can be reduction and even elimination of aggressive behaviors.

Integrative Manual Therapy for Autism Related Issues

In addition to the behaviors that are so common to Autism, children that are on the spectrum typically suffer from many digestive issues as well as food allergies. Many children with autism have eczema and other types of skin related issues. IMT can also be used to help restore immunity in the body and decrease inflammation in the gut. A typical IMT treatment program would include manual therapy techniques for the digestive tract in combination with

a nutritional program that included dietary intervention and nutritional supplementation. The nutritional supplementation and dietary intervention is helpful to accelerate recovery.

For example, a Gluten-Free Diet is one of the more common dietary recommendations given to a child with Autism. Gluten is found in wheat, rye, barley, and oat. Gluten is pro-inflammatory. This means that when eaten, gluten will contribute to increased inflammation in the body, specifically in the body's weakest systems. Most children with Autism already have digestive issues such as reflux, constipation, abdominal cramping, gas, and more. When gluten is consumed, the underlying problem may worsen. By removing gluten from the diet, often, much of the digestive problems disappear on their own. In addition to affecting the gut, gluten can also contribute to increased inflammation in the brain. Remember the child with aggressive behaviors secondary to limbic system dysfunction or the child with hypersensitivity to sound secondary to compression of the inner ear. All of these problems can worsen with increased inflammation.

How to Include Integrative Manual Therapy into a Treatment Program

IMT is practiced by many Physical Therapists, Occupational Therapists, Massage Therapists, and Chiropractors. When designing a comprehensive multi-disciplinary treatment program for a child with Autism, IMT is an important component of the program. It can complement and even accelerate the benefits of other treatment approaches by addressing structural dysfunction in the body.

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