ASHEVILLE INTEGRATIVE MEDICINE
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Autism: A Perspective

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Much has been said and written about autism in the past several years. Autism has become a household word. When I was a resident, over 20 years ago, it was a relatively rare diagnosis, and certainly not a condition that the general public had much awareness of. Now, many of us know of a child with autism either in our own family or our neighbor's or in the community. When a child is not developing like his peers, a parent's first concern today is that he might have autism while simultaneously hoping that he does not.

Human beings relate to each other by reciprocal interaction: this is natural to us. That is why autism is such a puzzling condition to understand. We are bewildered when a child does not return eye gaze, is often in their own world, does not speak like other children, or speaks oddly, and has unusual behaviors and intense temper tantrums that make no sense to us.

No two children with autism are the same. Although there are underlying similarities, there is wide variation with regard to the degree of their language development, their ability to read social cues, the quality of their interactions and their overall temperament. In addition, behaviors can change from day to day with children having "good days" and "bad days" as parents and therapists know. Some children are "high functioning", others are almost totally "non-verbal". Some have marked "sensory issues" and "self stimming behaviors", others just a few. Some have little interest in toys and prefer to line up or manipulate parts of objects, others have well-developed imaginative play.

What is causing autism? We still don't fully know, although we have come a long way towards understanding the underlying pathology of autism better. There was a time when it was firmly believed that autism was caused by a lack of bonding: "the refrigerator mother" theory. When I first came to the Appalachian Mountains I read a book about the Appalachian people written by a local pastor and counselor, in which he observed that autism was not seen among the mountain folk, and concluded that this was because families were close-knit and mothers were devoted to their children. Dr. Bernard Rimland was instrumental in helping to dispel this myth of the refrigerator mother. In 1964, after extensive research on the subject, Dr. Rimland wrote a book called "Infantile Autism: The Syndrome and its Implications for a Neural Theory of Behavior". He challenged the hypothesis that autism was an emotional disorder and argued that biological causes needed to be looked for. The flood of responses he received from parents and research scientists who read his book helped to develop the biomedical treatment approach to autism that took shape over the following years.

We know today that autism is NOT an attachment disorder caused by poor parenting. On the contrary, it has been my experience that parents who have a child with autism, once they have gone through the initial shock and grief process, are able to tap into a much deeper capacity to love their child. They usually rise to the challenge; many embark on a relentless search for answers and become strong advocates for their children. The current understanding of what causes autism, based on the Autism Research Institute and its Defeat Autism Now (DAN) Project, is as follows: Autism is the result of an interplay between genetic vulnerability and environmental triggers. The condition may show up at birth or present within the first two-and-a-half years. Some children have a genetic incapacity to detoxify environmental toxins efficiently:

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this leads to inflammation in the gut as well as the brain, oxidative stress and immune dysregulation. Some environmental toxins that are implicated are heavy metals, pesticides and other pollutants. There is no one single gene that causes autism. Rather there are many genes whose unusual but possible expression produces a risk or predisposition for developing autism. For example some children with autism may have abnormalities in their methionine metabolism pathway, resulting in low levels of glutathione and inadequate detoxification. Or, a defect in the gene for the enzyme paraoxonase can result in weak organophosphate (pesticide) detoxification and this can be a risk factor for autism.

Autistic children frequently have inflamed intestines as shown by several studies. They also usually have food sensitivities and intestinal dysbiosis with yeast overgrowth and also sometimes bacterial overgrowth in the intestines. Toxins produced by yeast, and/or bacteria, as well as partially digested protein molecules can enter the blood stream and produce behavioral changes.

Autism is also associated with inflammation in the brain as shown by a landmark study by Vargas et al in 2004. The brains of 11 individuals with autism ages 5 to 44, who had died of injuries, were studied and compared with normal control brains. All the autistic brains were found to have immune activation and evidence of inflammation.

In addition to food sensitivities, children with autism frequently have inhalant allergies and asthma, and may have recurrent viral or skin infections.

Usually around 15 months to 2 years an affected child will begin to display symptoms related to toxicity and dysfunction of his nervous system and he will either slowly or rapidly enter into a state of developmental disorganization which then gives him a label on the autism spectrum. In their book “Autism: Effective Biomedical Treatments” Dr. Sidney Baker and Jon Pangborn, PhD provide a time-line of how this might happen:

- Genetic predisposition
- Exposure to toxins such as heavy metals (mercury, lead, cadmium, aluminum, etc), pesticides and other pollutants
- Antibiotics received in the first months of life
- Disturbance in the balance of gut flora and damage to the digestive tract
- Damage to GALT (gut associated lymphoid tissue)
- Increased intestinal permeability or “leaky gut” which allows larger molecules such as peptides from incomplete protein digestion and other antigens and toxins to enter the blood stream
- Live virus exposure from the 3-in -1 vaccine with a persistence of the measles virus in GALT and the central nervous system or CNS
- Gastrointestinal, immunological and CNS symptoms, signs and laboratory evidence of inflammation.

The Defeat Autism Now Project has shown that when we take steps to reduce toxic exposure, reduce inflammation, heal the gut, counteract oxidative stress, support the immune system and support the body’s ability to detoxify, many children begin to show improvements in behavior, speech, language and learning. This is the basis of the biomedical approach.

At AIM, we work with parents to reduce further toxin exposure and improve general nutrition, by improving the quality of foods eaten. Special diets such as the gluten-free casein free diet or the anti yeast diet are also recommended. Based on food allergy testing, additional foods may need to be removed from the diet. Removal of offending foods helps to heal the gut. We also offer oral desensitization drops to reduce or eliminate food allergies. We recommend supplements to optimize inadequate or suboptimal nutrient intake and provide digestive and antioxidant support. In addition we test for and treat intestinal dysbiosis with antifungal or antibacterial therapy and support methylation and sulfation processes to help with detoxification. We also offer oral or transdermal chelation of toxic heavy metals as determined by testing.