

Heavy Metal Poisoning vs. Autistic Spectrum Disorders

This month's newsletter will categorize Autistic Spectrum Disorders, plus the intake of poisonous heavy metals and their direct interference with decreased body zinc levels and increasing copper amounts, with many studies exposing the poisoning process.

So Far, five Autistic Spectrum Disorders (ASD) have been categorized by the University of Michigan to identify this complex array of symptoms found in our child population here in the United States. These include autistic disorder, pervasive development disorder (PDD), Asperger Syndrome, childhood disintegrative disorder (CDD), and Rett Syndrome. In general, we are identifying children at 18 months and before age three with stereotypic behavior, communication, and social interaction problems. (1) Any or all of these are devastating to the parents involved with a problem child, not to mention the time and costs involved to treat and maintain their needs over time. Regarding numerical values, the Centers for Disease Control and Prevention (CDC) released on March 27, 2014, autism figures in the U.S. as one out of 68 children having ASD problems, mostly males. (2)

A year after the CDC release, the role of body zinc deficiency in heavy metal poisoning and copper increases became a common consideration identified in a study of autistic spectrum disorders. This is the same phenomena we see in adult chronic heavy metal poisoning as pointed out on page 10 of -Heavy Metal Poisoning, Identification, and Oral Treatment Considerations for Adults-. Zinc is being displaced by the toxic heavy metals to increase toxicity within the human body. (3,4)

The year 2016 came to grips with the relationship of heavy metals to autistic disorders. A single review entitled *The relationship between mercury and autism: A comprehensive review and discussion* collated over 90 studies published between 1999 and early 2016, examining the relationship of ASD and mercury alone as a probable causative element. Almost 75% of these studies suggest mercury as a risk factor for ASD. (5). Obese mothers with high mercury body stores are also seen as probable contributors to this risk of fetal development of ASD because of high levels of mercury in their urine, blood, and hair samples contributing to the hypothesis of placental transfer of mercury from mother to baby. (6). This is backed up with a previous study showing normal zinc and copper body stores being disrupted by mercury to interfere with enzymes outside the cells to remake fat tissue. Tissue inhibitors are more pronounced in fat tissue as opposed to lean tissue. (7) Mothers again are identified in an Egyptian study noting higher numbers of dental amalgam fillings delivering ASD children as opposed to healthy control groups. Lead exposure is also included in this study. (8) A study in 2017, suggesting maternal infection and inflammation, obesity and toxic exposure, including heavy metals, may add to the risk of ASD in their children. (9) Two earlier studies noted hair tests for high accumulations and concentrations of toxic heavy metal mercury as a plausible culprit in ASD too. (10,11) The University of Texas Southwestern Medical Center at Dallas determined high hair concentrations of mercury in children again and pointed to exposure problems for ASD. (12) But blaming mothers

may not be the whole story. Two studies released recently added environmental pollution of toxic heavy metals as suspect for ASD problems by examining the U.S. Environmental Protection Agency Toxic Release Inventory for almost 2500 tracts of land and associated air (10 years) for prevalence and proximity to industrial facilities releasing arsenic, lead or mercury. Their findings suggest multiple toxic heavy metals may have additive effects for ASD prevalence in a given area. (13,14) Now the relationship of toxic heavy metals to ASD is beginning to make sense.

References

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