

## **Thimerosal Linked To Autism: New Clinical Findings**

The Journal of Toxicology and Environmental Medicine, Part A: Current Issues, an authoritative journal featuring original toxicological research, has published, "A Case Series of Children with Apparent Mercury Toxic Encephalopathies Manifesting with Clinical Symptoms of Regressive Autistic Disorders," by Geier and Geier (2007).

This new study leaves little doubt there is a direct causal link between mercury exposure from Thimerosal-preserved biological products (vaccines and Rho(D) products) and mercury poisoning diagnosed as an autism spectrum disorder (ASD).

Thimerosal (49.55% mercury by weight) is a highly toxic mercury compound used as a preservative in some OTC and prescription drugs, including most flu shots given to pregnant women, infants, children, adults, and the elderly.

On April 19, 2007, Dr. Larry L. Needham, Chief, Organic Analytical Toxicology Branch, CDC, announced to the US National Academy of Sciences' Institute of Medicine that Thimerosal was among the "Chemicals Linked to ASD."

Thus, Geier and Geier (2007) provide the first clinical case-series of ASD patients that confirmed this causal role for Thimerosal-preserved drugs in patients having a regressive ASD diagnosis.

The Geiers describe a case-series of eight patients who had:

- . a regressive ASD diagnosis,
- . elevated levels of androgens,
- . excreted significant amounts of mercury after a chelation challenge,
- . biochemical evidence of decreased function in their glutathione pathways,
- . no known significant mercury exposures except from

Thimerosal-preserved vaccines and Rho(D)-immune globulin preparations, and . other alternate causes for their regressive ASDs ruled out.

This clinical study also found a significant dose-response relationship between the severity of the ASD symptoms and the total mercury dose these children received from Thimerosal-preserved drugs.

Based on differential diagnosis, these patients evaluated were exposed to significant mercury amounts from Thimerosal-preserved biologic drugs during their fetal and neonatal development as well as between 12 and 24 months of age.

Thus, these initially normally developing children suffered mercury toxic encephalopathies that manifested with clinical symptoms consistent with their regressive ASD diagnosis.

Hence, mercury poisoning should be considered as a cause for those children exhibiting the symptoms of an ASD in any differential diagnosis designed to assess underlying causes.

Today, any parent or other healthcare provider can easily confirm whether, or not, a non-chelated autistic child is mercury poisoned by having urinary porphyrin profile analysis (UPPA) testing run at LabCorp (Test#120980) or Laboratoire Philippe Auguste (Urine Porphyrin Profile).

For additional information on UPPA testing for mercury poisoning, please visit the "UPPA" page on CoMeD's web site, <http://www.Mercury-freeDrugs.org>.

## **A Case Series of Children with Apparent Mercury Toxic Encephalopathies Manifesting with Clinical Symptoms of Regressive Autistic Disorders**

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**DOI:** 10.1080/15287390701212141

**Publication Frequency:** 24 issues per year

**Published in:**  [Journal of Toxicology and Environmental Health, Part A](#),

Volume [70](#), Issue [10](#) January 2007 , pages 837 - 851

**Subjects:** [Environmental & Ecological Toxicology](#); [Environmental Health](#);

**Formats available:** HTML (English) : PDF (English)

### **Abstract**

Impairments in social relatedness and communication, repetitive behaviors, and stereotypic abnormal movement patterns characterize autism spectrum disorders (ASDs). It is clear that while genetic factors are important to the pathogenesis of ASDs, mercury exposure can induce immune, sensory, neurological, motor, and behavioral dysfunctions similar to traits defining or associated with ASDs. The Institutional Review Board of the Institute for Chronic Illnesses (Office for Human Research Protections, U.S. Department of Health and Human Services, IRB number IRB00005375) approved the present study. A case series of nine patients who presented to the Genetic Centers of America for a genetic/developmental evaluation are discussed. Eight of nine patients (one patient was found to have an ASD due to Rett's syndrome) (a) had regressive ASDs; (b) had elevated levels of androgens; (c) excreted significant amounts of mercury post chelation challenge; (d) had biochemical evidence of decreased function in their glutathione pathways; (e) had no known significant mercury exposure except from Thimerosal-containing vaccines/Rho(D)-immune globulin preparations; and (f) had alternate causes for their regressive ASDs ruled out. There was a significant dose-response relationship between the severity of the regressive ASDs observed and the total mercury dose children received from Thimerosal-containing vaccines/Rho (D)-immune globulin preparations. Based upon differential diagnoses, 8 of 9 patients examined were exposed to significant mercury from Thimerosal-containing biologic/vaccine preparations during their fetal/infant developmental periods, and subsequently, between 12 and 24 mo of age, these previously normally developing children suffered mercury toxic encephalopathies that manifested with clinical symptoms consistent with regressive ASDs. Evidence for mercury intoxication should be considered in the differential diagnosis as contributing to some regressive ASDs.

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