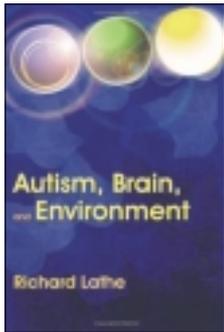


Books

Evolving views on the causes of autistic spectrum disorders



Autism, Brain and Environment
Richard Lathe
Jessica Kingsley Publishers, 2006
£15.99, 288 pages
ISBN 1 84310 438 5

Richard Lathe's book *Autism, Brain and Environment* discusses new ways available for the scientific and medical communities to view potential causes and treatments of autism. The book concludes that there is an ongoing rise in the prevalence of autism spectrum disorders (ASD), which is evidenced by an excess of younger children being affected, a decline in Asperger's disorder as a proportion of ASD, the evolution of twin concordance rates, and a ten-fold decline in fragile-X syndrome in ASD. Lathe warns that the data suggest that 90% of current cases of ASD are due to "new phase autism", which has a cause that is distinct from classic autism.

Several studies have linked limbic damage involving areas controlling memory, desire for sameness, anxiety, perception of facial features and emotion, and social interaction to ASD. The role of environmental factors in brain function has also been assessed and individuals with ASD have shown evidence of exposure to heavy metals. In his book, Lathe concludes that a combination of toxins could underlie autism, but predominantly in individuals who are genetically susceptible. Many children with ASD are likely to be especially sensitive because they cannot export mercury, and perhaps other metals, because of pre-existing genetic polymorphisms in genes associated with detoxification of mercury. Mercury from maternal dental amalgams, seafood consumption, and other environmental sources could play a part in mercury exposure leading to ASD; however, Lathe concludes that the route (injection) and timing (during gestation and infancy) of mercury exposure would seem to be by far the most likely risk factor for neurodevelopmental disorders.

Function of the brain and body are intertwined with the limbic brain regulating a pathway that extends through a cascade of sequential activation of the hypothalamus-pituitary-adrenal axis to other organs of the body. Porphyrin excess associated with heavy metal exposure could predispose to seizures and neuronal loss, while inhibition of key enzymes by heavy metals contributes to oxidative damage in the brain. Potential treatments might include reduction of gastrointestinal problems associated with ASD, heavy metal removal with chelating agents, remediation of biochemical deficits with vitamin and cofactor supplementation, and adjustment of hormonal abnormalities. Intensive educational programmes, including speech and behaviour therapies, have also been shown to be helpful in many patients with ASD. The limbic brain has regenerative capacity, especially early in life; therefore, early intervention, both biochemical and educational, is more likely to result in a more favourable outcome.

This book should be recommended reading by health-care providers and parents alike so as to encourage an expanded view of ASD beyond the idea that ASD is only a psychiatric disorder with unknown genetic causes to encompass other possibilities. These possibilities include the view that some cases of ASD could be due to potentially treatable biochemical disorders of the limbic brain caused largely by environmental toxins in individuals who are especially susceptible to toxic insult because of their pre-existing genetic polymorphisms resulting in impaired ability to export mercury.

Mark R Geier
mgeier@comcast.net

Communication error



Eye Contact
Cammie McGovern
Viking, 2006
£12.99, 304 pages
ISBN 0 670 91615 3

There has been a cornucopia of books written by parents-cum-authors wishing to share their personal experiences of autism with the world. So, when a twist in the familiar tale came to me in the form of a murder mystery novel I was eager to read more. Cammie McGovern embellishes her own experiences as a mother of an autistic child to compassionately explore the world of autism in a new light. While *Eye Contact* takes us on a gripping journey of psychological suspense in "the powerful story of the tangled emotional bond between a mother and her young son", it provides a portal for McGovern to reaffirm her belief "that even in the presence of a devastating disorder like autism, happiness, joy, success, love, and even friendships are all still possible".

The word autism, which comes from the Greek *autos*, meaning "self", was first used in the English language by

Swiss psychiatrist Eugene Bleuler in 1912. However, the classification of autism was not used until 1943 when psychiatrist Dr Leo Kanner of the Johns Hopkins Hospital in Baltimore reported 11 children with striking behavioural similarities. Kanner used the term autism to describe the fact that the children seemed to lack interest in other people. Now, the Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR lists five pervasive developmental disorders, often referred to as autism spectrum disorders, as conditions characterised by varying degrees of difference in communication skills, social interactions, and restricted, repetitive, and stereotyped patterns of behaviour. In her book, McGovern describes the many barriers to communication that occur between people with autism, their families, and the community around them.