DISCLAIMER

The information contained within this document does not constitute medical advice or diagnosis and is intended for education and information purposes only. It was current at the time of publication and every effort is made to keep the document up to date.

The information contained herein includes both psychological and non psychological interventions. The delivery of psychological services requires a medical referral whilst non psychological services do not.

Each person is an individual and has a unique psychological profile, biochemistry, developmental and social history. As such, advice will not be given over the internet and recommendations and interventions within this website cannot be taken as a substitute for a thorough medical or allied health professional assessment or diagnosis.

A different world - Exploring Autism

An article written by Beverly Shamon – Turner
Medical Herbalist, Iridologist, Kinesiologist, Naturopath and Clinical Nutritionist

Telephone : (07) 5535 1552
Email : infor@eternalhealthconcepts.com
www : http://eternalhealthconcepts.com/index.html

Article QUICK LINKS :

INTRODUCTION

The clinical syndrome of autism has become more noticeable in recent times with an increasing number of cases diagnosed year after year. The exact number of diagnosed cases is difficult to determine as the definition of autism varies between studies. A survey conducted in Western Australia indicated a ten-fold increase in the 1980's and 1990's and a recent survey mandated by the California State Legislature found an increase of 273 percent in California in the past eleven years.

Incidences of autism, first identified by Leo Kanner in 1943, seem to occur in about 15 of every 10,000 births with up to four times the cases in boys as opposed to girls.

In typical cases the child appears to be a normal, reasonably healthy infant for the first 18 to 24 months then there may be regression of speech development often to the point of muteness.

SYMPTOMS

Severe problems with behaviour, communication and social relationships are caused because of the inability to understand what victims would normally sense through sight, touch and hearing.

There are often a variety of repetitive behaviours and the need for sameness, which strongly resemble obsessive-compulsive tendencies. Differential diagnosis may include childhood schizophrenia, depression, obsessive-compulsive disorder (OCD), anxiety disorder, and other neuroses.

Related behaviours include irrational fears, poor eye contact, aggressive or self-injurious behaviours, temper tantrums, depression, mental confusion, irritability and inexplicable changes in mood. Other symptoms include excessive thirst, excessive sweating, especially at night, low blood sugar, diarrhoea, bloating, rhinitis, inability to control temperature, red face and / or ears, dark circles under the eyes, etc. There may be sensitivity to light and a pronounced 'poking' movement with hands.

Autism may occur on its own or in association with other disorders which affect the function of the brain, e.g. metabolic disturbances and epilepsy. Difficulties can vary from mild to severe and there is often an accompanying intellectual handicap. Symptoms of schizophrenia with delusions and hallucinations may begin in some individuals as they go into young adulthood.

Some sufferers can do certain things very well, very quickly, but not tasks involving social understanding. This can be the case with Asperger's syndrome, which some consider a distinct condition, whilst others argue it is simply the higher functioning end of the autism spectrum. Sufferers of Asperger's syndrome may exhibit some features of autism but are often very successful, sometimes seen as brilliant, eccentric, absentminded, socially inept, and a little awkward physically. They may demonstrate gaze avoidance in social situations and have trouble with social skills where they, although wanting to get to know others, don't really know how to do it. They can be apprehensive about change and prefer routine.

A 'different' way of using language might be observed with Asperger's syndrome - a child may have a wonderful vocabulary but not truly understand the nuances of language. They may also be thought of as clumsy and not truly involved in life as others are.

TESTING

Little information is found with EEG examination but CT scans have shown a subgroup of children with enlarged ventricles. There may be an association in individual cases with cytomegalic inclusion disease or congenital rubella syndrome.

CAUSES

It seems likely that both genetic predisposition and environmental factors, influence autism in a child. Measles and cytomegalovirus have also been implicated as environmental "causes" of autism and some say there is mounting evidence that a small proportion of autistic children were injured by one or more childhood vaccinations or viruses i.e. chicken pox, tonsillitis or ear infections.

VACCINATIONS

At present primary suspicion for this epidemic of neurobehavioral disorders rests with the measles - mumps rubella (MMR) vaccine.

One study found that 84% of autistic children tested had antibodies to brain tissue in the form of antibodies to myelin basic protein. There was also a strong correlation between myelin basic protein antibodies and antibodies to the MMR vaccine.. There were also signs of central nervous system and genetic damage following vaccination. "Results indicate that autoimmune pathology is more frequent in countries where vaccination is more widespread…."

Also found was live measles virus in the intestinal lining of children with autism, raising the possibility that the MMR may actually be responsible for some of the gastrointestinal abnormalities common in these children. The study also notes "some interesting parallels between autism and tetanus"

CHRONIC INFECTION BY VACCINE VIRUSES

Dr. Andrew Wakefield and co-workers of the Royal Free Hospital in London found a possible link between MMR vaccine, Crohn's disease of the bowel, and autism.

In a selected group of previously, apparently normal children the data provides further support for a link between autism and the gut. Onset of behavioural symptoms linked with MMR vaccination appeared in some and all children had significant intestinal pathology.

If the MMR vaccine were causing an autoimmune reaction involving the brains of autistic children, what would be the mechanism?

One of the differences between the vaccine and the respective wild virus infections is the way they enter the body: injections versus mucosal entry. Another difference is that wild viruses have serial passage through human hosts, a vaccine may be incubated in animal culture tissue.

Viruses are highly susceptible to the process of "jumping genes" in which they may incorporate genetic material from tissue in which they are cultured. The process may be further affected by the fact that protein sequences in the measles virus have been found to be similar to those found in brain tissues.

This has been shown in tests of blood samples which led to the discovery of unique cell-destroying viruses, termed 'stealth viruses" that were not recognised by the immune system. These are thought to have clearly originated from the simian cytomegalic virus, and they would induce immune responses from the host.

Live attenuated vaccine viruses can not only revert to virulence, but "may cause [a] mild form of disease;" or, due to the presence of viral genomes, "may be[come] pathogenic or oncogenic (cancer causing) in some [people's] systems." Aside from these forms of infection, persistent or latent infections may be engendered by viruses (Molecular Virology, pp. 39-41).

This does not detract from the fact that these diseases, such as measles, may have complications resulting in brain injury. Measles can precipitate subacute sclerosing pariencephalitis and encephalomyelitis. The latter illness may follow not only measles, but also rubella, varicella, mumps, influenza, and other childhood diseases, just as smallpox and rabies vaccinations may be complicated by postvaccinal encephalomyelitis. in these cases, the vaccine itself could cause similar sequelae through molecular mimicking.

But there is still another means by which a live virus vaccine can cause disease: since vaccine viruses are grown in animal or human cells, contaminating or endogenous ('produced from within') animal viruses can inhabit the vaccine and infect a vaccinated individual. Early batches of killed polio vaccine, for instance, were found to be contaminated with Simian Virus 40 (Molecular Virology, pp. 39-43; 75-6; 78-9), which has been linked with cancer years after infection.

Another thought is that many of today's children are the second-generation to be exposed to vaccines. Born to mothers vaccinated for measles, mumps, and/or rubella, it is possible the reaction may be increasing in this generation due to sensitisation to the vaccines being transmitted to the foetus during pregnancy.

MERCURY [HG]

It is hypothesised that the regressive form of autism represents another form of mercury poisoning.

Autistic brains show neurotransmitter irregularities, which are virtually identical to those arising from Hg exposure: both high or low serotonin and dopamine, depending on the subjects studied.

Mercury in vaccinations should be considered a probable source. It is also possible that vaccinal Hg may be additive to a prenatal mercury load derived from maternal amalgams, immune globulin injections, or fish consumption, and environmental sources.

Nearly all US children are immunised, yet only a small proportion develops autism. How do we explain this? A

pertinent characteristic of mercury is the great variability in its affects on the individual - at the same exposure level, some will be affected severely while others will be asymptomatic. An example is acrodynia, which arose in the early 20th Century from mercury in teething powders. It afflicted only 1 in 500-1000 children given the same low dose.

SEROTONIN

Two of the most consistently observed biological findings in autism are increased serotonin levels in the blood and immunological abnormalities. 15 The finding across several studies is that approximately 25% of autistic people have significantly increased levels of blood serotonin (a neurotransmitter) and that these increased serotonin levels are also common in severely retarded individuals compared to the general population.

TREATMENT

Dr. Rimland of the Autism Institute in the U.S. believes that cases would show dramatic improvement if Candida / yeast infections, usually brought on by antibiotic overuse, were successfully treated.

He cites an example of a three-and-a-half-year-old boy who had been a bright and active youngster. After the diagnosis of autism his parents took him to an allergist where it was found that the boy's immune system was severely impaired - possibly linked to numerous antibiotics he had been given to control his ear infections. He was sensitive to moulds and his diet was modified to exclude sugars and refined carbohydrates.

A few years later he was an active, greatly improved child with few remaining signs of autism although still requiring treatment.

ALLERGIES

Many parents feel their children have 'allergy-induced' autism. The main offenders appear to be wheat, cow's milk, corn, sugar and citrus fruits. If dietary intervention is used, reducing the amount of offending foods, some alleviation of symptoms may be observed, particularly symptoms such as sleeplessness, aggression to self and others and hyperactivity.

SULPHATE

Some autistic children show a low capacity to oxidise sulphur compounds and low levels of sulphate. These findings may be linked with mercury problems reducing sulphate absorption.

Sulphate should attach itself to unwanted substances such as residues of medications, breakdown products of foods and chemicals etc. It then assists in these substances being excreted through the kidneys as waste products. If it doesn't these could then build up and possibly cause a brain dysfunction.

SECRETIN

Secretin, a neurotransmitter in the neuropeptide group, is one of the hormones that controls digestion and is secreted by cells in the digestive system when the stomach empties. It stimulates the pancreas to emit digestive fluids that are rich in bicarbonate, which neutralises the acidity of the intestines, the stomach to produce pepsin (an enzyme that aids digestion of protein), and the liver to produce bile.

It was found that some children who had tests such as gastrointestinal endoscopy showed remarkable improvement afterward. This reaction is thought to be from the secretin given intravenously during the procedure.

Its use is controversial and a potential problem exists in the differentiation between the sequence of human and porcine secretin used in treatment, which may or may not be enough to induce antibodies.

VITAMIN AND MINERAL SUPPLEMENTATION

Children with autism may benefit from taking a vitamin / mineral supplement. It is thought they may have a 'leaky gut', and so are unable to absorb nutrients from their diet as well as they could do.

Vitamin B6 and magnesium, as well as all the other nutrients, in particular niacinamide, pantothenic acid, Diimethyl glycine (DMG) and vitamin C, with digestive enzymes have benefited. Considerable behavioural improvement was reported in the 1968 study by German investigator, V. E. Bonisch, when autistic children were given (100 mg to 600 mg per day) of vitamin B6. It was reported that three of Bonisch's patients spoke for the first time after the vitamin B6 was administered.

The conclusion, which appears to have been reached at this time, is that although autism appears to be multi-factorial in cause there are a number of avenues open to patient parents to work towards control and improvement of the condition. The tagging of different 'syndromes' does not get away from the fact that there are complex links between the immune system, the central nervous system and the endocrine system on the one hand, and psychological phenomena ... on the other...and that whatever the label, often the chain of causative factors will be similar.

FURTHER READING

- Bodywork, Breathing and Movement for Sensory Integration, General Health and Wellbeing
- Sensory-Motor Integration and Learning
- Stages of Brain Development

For more information or to make an appointment please contact us on (02) 9637 9998 during business hours.

LINKS

PLEASE NOTE :
Learning Discoveries offers the links below as a convenience to our clients and the users of this website. However, we do not control third party websites and we are not responsible for the websites content.

- **Forum on Alternative and Innovative Therapies**,
  University of Saskatchewan College of Medicine, Canada

  http://healing-arts.org/children/

  Written and overseen by Lewis Mehl-Madrona, M.D., Ph.D.
  Associate Professor of Family Medicine and Psychiatry

  This site is a wealth of information for parents and professionals.

- **The Autism Network for Dietary Intervention (ANDI)**

  http://www.autismndi.com/

  Provides help and support for families using a Gluten Free and Caesin Free diet in the treatment of autism and related developmental disabilities.

- **The Autism Research Institute (ARI)**

  http://www.autism.com/ari/

  Autism Treatment Evaluation Checklist (ATEC)
  http://www.autism.com/ari/atec/

  The Autism Research Institute (ARI) is the hub of a worldwide network of parents and professionals concerned with autism. The founder and director of ARI is Bernard Rimland, Ph.D., an internationally recognized authority on autism and the father of a high-functioning autistic son. ARI is a non-profit organization which provides its services free of charge, except for nominal fees to cover postage and printing. ARI depends for its support upon charitable contributions from concerned individuals and organisations.

- **Autism : Intervention Strategies and Synergies Conference and Exposition, Key Note Address, Denver Colorado, Canada**

  http://www.angelfire.com/journal/ldps/DenverAutismConference.htm

  Keynote Address by Rosemary Boon

- **The Interdisciplinary Council on Developmental and Learning Disorders**

  http://www.icdl.com/

  The Interdisciplinary Council on Developmental and Learning Disorders - Chaired by Stanley Greenspan M.D., the ICDL is a non profit organisation of professionals from all disciplines working with children with developmental and learning disorders, collaborating and sharing knowledge. Its aim is to improve the identification, prevention and treatment of developmental and learning disorders. It's a wealth of information for professionals and parents.

REFERENCES

1. Professor Margot Prior, a presentation at the Cato Conference Centre, May 17th, 1999. First printed in Autism News September 1999

2. Changes in Population of Persons with Autism and Pervasive Developmental Disorders in California's Developmental Services System: 1987-1998, a Report of the Legislature, March 1, 1999.

3. Changes in Population of Persons with Autism and Pervasive Developmental Disorders in California's Developmental Services System: 1987-1998, a Report of the Legislature, March 1, 1999.

4. Singh V, Yang V. Serological association of measles virus and human herpes virus-6 with brain auto antibodies in autism. Clinical Immunology and Immunopathology 1998;880):105-108.

5. Massimo Montinari, et al, Department of Paediatric Surgery, University of Bari, Italy, presented May 9, 1996 http://www.healthy.net/library/articles/coulter/biochem.htm

6. Bolte E, "Autism and Clostridium, Tetani: An Hypothesis" [Medical Hypotheses, vol. 51, 1998, pages 133-144.

7. Wakefield A.J, et al. fleal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. Lancet 1998;351:637-641. 17. Kumar S, Miller LK. Effects of serial passage of Autographa California nuclear poly hedrosis virus in cell culture. Virus Research 1987;7:335-349.

8. Wakefield et a] (1998) Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. Lancet 351; 637-641.

9. Martin WJ, et al. Stealth virus epidemic in Mohave Valley, 1: Initial report of virus isolation. Pathobiology 1997;65(l):351-356.

10. Gupta S, et al. Dysregulate immune system in children with autism, beneficial effects of intravenous globulin on autistic characteristics. J of Autism and Developmental Disorders 1996;26(4):439452.

11. Gillberg C., Coleman M. The Biology of the Autistic Syndromes, 2nd edn. London: MacKeith Press, 1992.

12. Alm JS, et al. Atopy in children of families with an anthroposophic lifestyle. Lancet 1999;353:1485-1488.

13. "Elevated Serotonin Levels in Autism: Association With the Major Histocompatibility Complex." Neuropsychobiology, vol. 34, number 2, 1996, pp. 72-5

14. Reilly B. A., Waring, R. Enzyme and sulphur oxidation deficiencies in autistic children with known food/chemical intolerances. Journal of Orthomolecular Medicine 1993; 4: 198-200.

15. Markovich D., Knight D., Renal Na-Si cotransporter NaSi-1 is inhibited by heavy metals. American Journal of Renal Physiology 1998; 274(2): Z83-289.

16. Horvath, Stefanatos, Sokolski, Wachtel, Nabors & Tildon, 1998

17. Dr Kalle Reichelt, NORWAY http://osiris.sunderland.ac.uk/autism/sec.htm