Autism Spectrum Disorders

Description

Autism spectrum disorders (ASDs) are a group of developmental conditions characterised by:

1) Impairments in speech and communication
2) Impaired social interactions
3) Restricted, repetitive and stereotyped behaviour and anxiety and compulsions

ASDs include 'classical' autism, Asperger syndrome and pervasive developmental disorder not otherwise specified (PDD–NOS).

Diagnosis

A diagnosis of an ASD is usually made by a multi-disciplinary team consisting of a developmental paediatrician, psychologist, and speech pathologist. Contributions from teachers, occupational therapists, and social workers can provide a major contribution to the whole assessment process and support the family.

Once an ASD is diagnosed, a paediatrician or clinical geneticist may look for an underlying cause that explains your child's ASD.

Causes

The term autism spectrum disorder is just a description of patterns of behaviour. There are probably thousands of separate underlying causes that lead to similar patterns of behaviour. The vast majority (about 90%) of patients have an unknown cause. We believe that in most cases the cause will be due to genetic factors, but currently many of these genetic factors are poorly understood.

You may be interested in finding out the cause of your child's ASD as sometimes an underlying diagnosis can have specific management or surveillance recommendations. If you plan more children, knowing the cause can provide you with accurate information about the chance of having another affected child and can allow prenatal diagnostic options. You should obtain a referral to see a clinical geneticist if you are interested in discovering the cause of your child's ASD.

Some currently recognised causes include conditions such as:

- Chromosomal abnormalities such as small deletions or duplications of genetic material
- Tuberous sclerosis
- Fragile X syndrome

- Rare genetic syndromes such as Rett syndrome can present with some features of ASDs

Many single gene faults (mutations) have been described in some patients with autism. Gene panels testing many genes at once are not routinely available but will greatly improve our diagnostic detection rate in the next few years.

ASDs affect males four times more often than females suggesting that there may be genes on the X chromosome that can predispose to autism.

Genetic factors do not account for the whole story, however. When one twin of an identical twin pair has autism, about 20% of the time the other twin does not develop the condition. This suggests that there are likely to be 'environmental factors' that trigger the onset of symptoms. Without these triggers, the condition will not develop. It may be that there is a genetic (inherited) predisposition to develop autism, triggered by other unknown factors.

Any evidence implicating the measles, mumps and rubella vaccine as a cause of autism has been discredited. There is no evidence that illness experienced by the mother during pregnancy or the child's diet early in life cause ASDs.

Treatment

Your paediatrician should be a valuable resource to help you navigate and take advantage of team based treatments.

Symptoms of ASDs usually appear during the first three years of childhood and continue through life. Life expectancy is normal but most children and adults require ongoing care and supervision. ASDs cannot be "cured" but services and support can greatly improve quality of life and behaviour.

Intervention services (including early intervention) can include behaviour management plans, developmental and social learning, and therapy based and family based interventions to meet the individual needs of children and their families. A child of school age can benefit from a tailored educational plan.

Occasionally, medications can help with challenging behaviours. There is no scientific evidence for special diets or vitamin supplementation.

Further information and support

http://www.fahcsia.gov.au/our-responsibilities/disability-and-carers/program-services/for-people-with-disability/helping-children-with-autism

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