

Epilepsy

In this document, you can read about the condition epilepsy. We tell you about the prevalence of epilepsy in people with autism (though no link has been found between the two conditions), the diagnosis and treatment of epilepsy, and further sources of information.

What is epilepsy?

Epilepsy is a condition in which the affected person has seizures or periods of loss of consciousness. It is the second most common neurological condition in the UK.

Epilepsy is due to an upset in brain chemistry, which means that the messages that travel between nerve cells or neurons become scrambled. Because of this, the activity of neurons is disturbed and results in a seizure or loss of consciousness. Many types of seizure can occur and epilepsy can affect anyone at any age.

Prevalence of epilepsy in children with autism

Tuchman and Rapin (2002) found that the incidence of epilepsy in children with autism ranged from 5% to 40%. Hughes and Melyn (2005) reported that the electroencephalographs (EEGs) of 75% of the children with autism showed abnormal patterns of electrical activity in the brain and 46% had seizures.

People with autism who have epilepsy show different types of seizure. The figures vary because each person with autism and epilepsy has a different mixture of epileptic entities, some of which include seizures while others do not. Also, epileptic entities are often not reported because of communication difficulties.

Types of seizures found in someone with autism include:

- infantile spasms
- infantile convulsions
- atonic seizures
- minor motor seizures
- absence epilepsy (also known as *petit mal*)
- complex partial seizures
- generalised tonic-clonic seizures (also known as *grand mal*).

Epilepsy may begin at any age in childhood. According to Tuchman et al (1991), it often occurs in the first three years of life, but equally, children with autism who have not had seizures before may develop them for the first time around puberty (Rutter, 1970; Kobayashi et al, 1992; Giovanardi Rossi et al, 2000).

Are autism and epilepsy linked?

The relationship between epilepsy and autism is poorly understood. It is not known whether epileptic activity in people with autism is a secondary phenomenon or whether, in some situations, it is responsible for some symptoms that occur in people with autism. This is partly because epileptic syndromes are often associated with cognitive, language and behavioural dysfunction, all of which are traits of autism.

For example, absence seizures (loss of consciousness) often 'masquerade' as autism when they are frequent, as the child may present with staring spells and other behaviours that may be mistaken for autism.

The association of severe problems with receptive-language disorders (understanding language), with epilepsy and with autism is not likely to be due to chance. This is because the same part of the brain, the temporal lobes, may not be functioning properly in all three conditions (Tuchman & Rapin, 2002).

Getting a diagnosis for epilepsy

If you are concerned that your child may have had an epileptic seizure, you should contact your family doctor or GP. If they think your child may have had a seizure, they should refer you to a specialist in epilepsy, usually a neurologist. It is important that the neurologist or any other professional who makes a diagnosis of epilepsy has experience of working with someone with autism as well.

The diagnosis of epilepsy is based mainly on the description of the seizure that you or an eye witness can give the neurologist. Hospital tests can also help them with the diagnosis.

For more information about the diagnostic process for epilepsy, go to www.epilepsy.org.uk/info/diagnosis or www.epilepsynse.org.uk/aboutepilepsy/diagnosis

The treatment of epilepsy

The treatment of epilepsy in someone with autism is similar to that of a person who does not have autism. For more information about the treatment options for epilepsy, contact one of the organisations in the 'Further information and contact details' section below. The same organisations can also provide more detailed information about epilepsy in general.

I freely admit this is 'nicked' from the National Autism Society's website and can be found at:

www.autism.org.uk/23609

So all credit goes to them for this useful article!