epilepsy action

Migrating partial epilepsy in infancy

Epilepsy Action is indebted to Dr Richard Appleton, a consultant who specialises in children's epilepsy, and his associates, at Alder Hey Hospital, Liverpool, who have kindly written this fact sheet.

For further information about epilepsy or anything mentioned in this factsheet, please contact the Epilepsy Helpline freephone 0808 800 5050 or helpline@epilepsy.org.uk.

What is a syndrome?
A syndrome is a group of signs and symptoms that, added together, suggest a particular medical condition. In epilepsy, examples of these signs and symptoms would be things like the age at which seizures begin, the type of seizures, whether the child is male or female and whether they experience difficulties with learning.

Migrating partial epilepsy in infancy
This is a newly-described epilepsy starting in very early childhood. It is also called:

- migrating partial seizures of infancy
- malignant migrating partial seizures in infancy.

It seems to be a very rare type of epilepsy.

Most children start having seizures in the first few weeks of life; all children will start having seizures by six months of age.

Symptoms
Different things happen in the seizures.

- The eyes may turn or deviate to the left or to the right.
- There may be some stiffness of the body, arms or legs (either affecting one side of the body or both sides of the body).
- The face may become very flushed (very red) and there is often a lot of drooling (salivation).
- There may be lots of tears in the eyes (but the child does not always appear upset).
- There may be chewing or some very brief cycling movements of the arms or legs.

All of these seizures are called 'partial' seizures. Sometimes these seizures may then progress into secondarily generalised seizures – and these are called tonic-clonic ('grand mal') seizures. This more commonly affects older children (aged two years and above).

The seizures may occur only infrequently (now and then) in the first few weeks after the epilepsy starts. However, very rapidly, the seizures increase in frequency to the point where they may occur 10, 20 or even 50 (or more) times every day, every day. When the seizures start in infancy they usually last only 30 seconds or up to one minute. In older children the seizures may last many minutes.

No cause has been found to explain this epilepsy. All tests, including brain scans, blood and urine tests, skin and muscle biopsies and genetic tests are usually normal. It is not due to any 'birth injury' and it does not seem to run in families.

It is possible that a child's development may show some progress if the seizures can be controlled for a number of months. However, this is very rare. Even if some development does occur, the child's developmental will not 'catch up'. They will still have learning difficulties. The learning difficulties are usually severe.

Diagnosis
The diagnosis is made by taking a very careful account of the seizures and especially at what age the seizures start and the details of the seizures. The EEG may be very helpful, especially if the child has seizures during the EEG. This will show that the seizures come from different parts of the brain. This is why it is called 'migrating' partial epilepsy of infancy (as the seizures 'migrate' or move from one part of the brain to another).

Treatment
It is unlikely that any anti-epileptic medication will ever control the seizures. Sometimes a medication called stiripentol may be helpful but only for a brief period. Other treatments have also been used but with very little success. These have included the ketogenic diet, steroids (prednisolone) and intravenous immunoglobulins. It is possible that the very oldest anti-epileptic drug bromide may control some of the seizures in some children. However, bromide may cause unpleasant side-effects and must therefore be used very carefully.

Prognosis (outlook)
The prognosis or outcome is usually very poor. This is because the seizures never come under control for more than a few days or a week at a time and sometimes they are never controlled. This means that they continue to happen every day. In addition, most children show very little developmental progress. No child with this condition has ever shown a completely normal development.

Support organisation(s)
Contact a Family, 209-211 City Road, London, EC1V 1JN, telephone 0808 808 3555, www.cafamily.org.uk

Epilepsy Helpline
freephone 0808 800 5050
text 07797 805 390
helpline@epilepsy.org.uk
www.epilepsy.org.uk

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If you have any comments you would like to make about this fact sheet, please contact us.

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Contact details
Epilepsy Action, New Anstey House, Gate Way Drive, Yeadon, Leeds LS19 7XY.
Tel: 0113 210 8800. Fax: 0113 391 0300.