Convulsive Status Epilepticus (a long lasting tonic-clonic seizure) is a medical emergency that should be treated as quickly as possible.

Approximately 20 in every 100,000 children per year will suffer with this type of seizure.

Phenytoin and levetiracetam are anticonvulsant medicines that are used in the treatment of children and young people who have long-lasting seizures. The EcLiPSE study was done to find out which one worked better at stopping these seizures.

In EcLiPSE:

- 152 Children were treated with Levetiracetam
- 134 Children were treated with Phenytoin
The Results...

Seizure stopped for 69.7% of children who received levetiracetam.

Seizure stopped for 64.2% of children who received phenytoin.

For the seizure to stop, it took an average of:
- 17.5 minutes when treated with levetiracetam.
- 23.5 minutes when treated with phenytoin.

Only one child had a serious reaction to one of the treatments and this was with phenytoin. The child made a full recovery.

More children that received phenytoin also needed another anticonvulsant medication and/or an anaesthetic medication to stop the seizure.

The results did not conclusively show levetiracetam was better than phenytoin in stopping long-lasting seizures. However, levetiracetam has advantages over phenytoin because it is given over a shorter time and has fewer side effects. This means it could become the preferred treatment. This will be discussed by specialist doctors in children’s epilepsy and emergency medicine to decide the best anticonvulsant that should be used to treat children with convulsive status epilepticus.