



## NEWBORN EMERGENCY TRANSPORT SERVICE: INFORMATION FOR PARENTS

Seizures  
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### SEIZURES

#### **Background**

Newborn babies are more prone to developing seizures because their brains are still developing. There are many causes of seizures in the newborn and they often require multiple investigations to find the cause. Sometimes no cause is found.

#### **Which babies get seizures?**

Babies that are born early are at higher risk of developing seizures. Other causes include low sugar levels, reduced oxygen or blood supply to the baby's brain around the time of delivery, infections (particularly of the brain - meningitis), bleeding in or around the brain (more common in premature babies), abnormal brain growth and rare problems with their metabolism. In some babies we never find a cause for the seizures.

#### **How do we treat seizures?**

If your baby is having seizures, we will need to do some investigations to find the cause. These include blood samples, a urine sample, a sample of the spinal fluid (lumbar puncture), an EEG (test of the electrical activity of the brain) and imaging of the brain (ultrasound and MRI scans). We can also monitor the baby's brain activity continuously with a portable EEG machine.

We will insert an IV into a vein to give fluids and medications. Most babies with seizures will be treated with antibiotics and antivirals until we are confident that infection is not the underlying cause. We may use medicines to stop the seizures (anticonvulsants). Sometimes these can make the baby sleepy, and if high doses of these medications are used, we may need to place the baby on a breathing machine (ventilator) for a short while.

#### **How long will my baby be sick?**

It is difficult to predict how long your baby will be in hospital. It depends on the underlying cause of the seizures and how sick your baby becomes. Your baby's stay may range from 5 days to 3 weeks. If the seizures continue we may also refer to the neurologists (brain doctors). They may organise additional follow-up of your baby.

#### **Are there any complications?**

Seizures in babies may affect their breathing in the short term. If the seizure causes your baby to stop breathing or drop their heart rate we may need to place him on a breathing machine (ventilator) until we find the cause and can control the seizures.

#### **Are there any long-term problems?**

Seizures can indicate a serious disease in a newborn. The cause of seizures an important predictor of long-term outcome. The treating team will discuss this with you once more investigations have been done and they will then discuss long-term follow-up. A neurologist may also be involved in your baby's care and in follow-up.

In about 1/3 of babies, seizures resolve; in 1/3 they may continue but resolve later in life; and in 1/3 seizures may continue in the long term. These babies usually require medications to control seizures once they are discharged.

**This information is intended as a guide only. If you have any concerns, please feel free to discuss with the NETS doctor retrieving your baby.**