Seizures occur when there is a problem with the brain waves, which are normal electrical impulses of the brain. Seizures are also called convulsions, fits, spells, and spasms.

**Causes of Seizures**
Many different problems may cause seizures. In general, the brain tissue is irritated or injured. Injury may be caused by lack of oxygen reaching the baby’s brain at some time, especially during or soon after birth. Bleeding into the brain tissue (called head bleeds), swelling of the brain tissue, meningitis or other infections of the brain tissue can cause seizures. Seizures may also develop due to imbalances in the nutrients in the blood.

**Symptoms of Seizures**
It is often hard to tell the difference between seizures and the behavior of normal babies, since the baby’s nervous system is not fully developed. Symptoms may include:
- Trembling mouth
- Fluttering eyelids, rolling eyes or changes in eye gaze
- Jerking arms and legs
- Body becoming straight and stiff or suddenly limp
- Pauses in breathing, called apnea, and slow heart rate, called bradycardia, along with a change in color. However, this can also be normal for premature babies.

Jittery movements can be normal, especially when a baby hears a sound or is suddenly awakened, and will stop by touching or holding the baby. Actual seizures will not stop when the baby is touched.

**Diagnosing Seizures**
An electrocardiogram, also called an EEG, will be done if the doctor thinks your baby might be having seizures. It is painless. Tiny electrodes, similar to those used for cardiac monitors, are placed on the baby’s head to measure and record brain waves.

Other tests may be done to try to find out what is causing the seizure activity. A head ultrasound, painless to your baby, looks for bleeds and other problems in the brain. A spinal tap may be done to see if there is an infection of the spinal fluid or brain tissue. Blood tests are used to look for infections or imbalances in the blood. A CT scan, which is a computerized x-ray, is used to show cross-sections of the body.
Treatment for Seizures
The treatment may depend on the cause of the seizures, such as treating an infection or imbalance in the blood. Treatment is necessary because seizures may affect a baby’s breathing or heart rate, and could eventually hurt the brain cells. Several medicines are available to help control seizures.

Care at Home
The nurses and doctors will teach you how to give any medicine your baby will need at home and tell you about important things to look for. Your baby’s doctor may decide that medicine is not needed to control seizures, but you should see the doctor if your baby starts having seizures again.

If you think your baby is having a seizure, stay calm. If gently holding the baby’s legs and arms does not stop the jerking movements, it is probably a seizure. Place pillows around your baby to keep him from hurting himself during the seizure and do not put anything in the mouth. The seizure will probably last only two to three minutes. After the seizure is over, check to see if any vomit or mucous needs to be cleaned from your baby’s mouth, then call the doctor. **If a seizure lasts more than fifteen minutes, rush your baby to an emergency room.**

Future Expectations:
A baby with seizures will not necessarily have brain damage or a lifelong seizure disorder. Some children outgrow seizures as their nervous system matures. Even if your baby grows out of having seizures, a high fever may cause any child to have a seizure.