



BRIGHAM AND WOMEN'S HOSPITAL

Parent Information Sheet: Amplitude Integrated EEG (aEEG) and Continuous EEG (cEEG)

What is an EEG?

An aEEG or cEEG is a test used to monitor your baby's brain activity. It monitors the brain's electrical waves similar to how an EKG monitors the heart's electrical rhythm.

Why do some babies have an aEEG/cEEG?

A baby may have one or both of these tests if a doctor is concerned that the infant is **at risk** of having a brain injury.

How is an aEEG done?

A nurse or doctor will place sticky leads (also called electrodes) on your baby's head. The electrodes are then connected to a bedside aEEG machine where brain waves can be seen on the aEEG monitor. If the aEEG shows a wave pattern that is concerning (for example, the waves are flatter or sharper than expected), then a cEEG will be done.

How is a cEEG done?

A cEEG specialist will place many electrodes on your baby's head using a special glue. The electrodes are then connected to a bedside cEEG machine, which is much larger than the aEEG one. The cEEG machine also has a video camera, so that your baby's brain waves and movements can be recorded at the same time. If there are abnormal brain waves, the neonatologists and neurologists (brain doctors) can see what, if any, abnormal movements happened at the same time.

How long does the cEEG test take?

At least 24 hours and, many times, longer.

Is either test (aEEG or cEEG) painful?

No, the electrodes do not hurt.

Can I hold my baby during the test?

Yes, as long as your baby's medical condition is stable.

What happens after the aEEG and/or cEEG is done?

The electrodes and any glue on your baby's head are removed. The medical team (neonatologist, neurologist and primary nurse) will sit with you to discuss the results and the next steps in caring for your infant.



aEEG



cEEG

Neonatal
Intensive Care
Unit
CWN Building,
6th Floor
75 Francis Street
Boston, MA
02115

617-732-5420