

Olympic Brainz Monitor – a Cerebral Function Monitor Information for Parents

WHAT IS CEREBRAL FUNCTION MONITORING?

Cerebral function monitoring uses a bedside medical device called the Olympic Brainz Monitor that allows the doctor to measure the electrical activity of your baby's brain. It is very helpful because it can be used right in the hospital's nursery, for long periods of time, and provides general information about your baby's brain activity. It is used if there is a question about your baby's neurological status.

HOW DOES THE CEREBRAL FUNCTION MONITOR WORK?

The Olympic Brainz Monitor uses electrodes placed on your baby's head to measure the activity generated in your baby's brain. The monitor then filters out extra signals and compresses the data. The CFM then displays the brain signal measurement so that your baby's brain activity can be evaluated by the doctor in real time.

IS THE CEREBRAL FUNCTION MONITOR THE SAME AS EEG (ELECTROENCEPHALOGRAPHY)?

Since the cerebral function monitor uses different processing methodology, the resulting display of brain activity is called an aEEG (amplitude integrated EEG). It is very similar to the raw EEG except that it has gone through several processes to filter out extra signals, rectify the brain signal, and slow down the display of data.

An EEG is a diagnostic tool that uses many electrodes (as many as 128 electrodes) to diagnose or rule out specific areas of brain injury. The bedside brain monitor only uses three or five electrodes to measure the *general activity* of your baby's brain to help the clinician assess the state of your baby's brain.

The cerebral function monitor displays both the aEEG and the EEG for the doctor's evaluation.

WHY WOULDN'T YOU USE EEG INSTEAD OF aEEG?

While EEG is a diagnostic tool, the aEEG is a monitor. EEG is almost always used in conjunction with aEEG. The EEG is a very detailed diagnostic look at your baby's brain activity during a limited period of time (usually 45 minutes to an hour). The aEEG cerebral function monitor is a *general review* of brain activity that can be used for very long periods of time (as long as 30 days if needed). If

there is questionable activity on the brain monitor, your baby's doctor may request a full EEG.

IS THE CEREBRAL FUNCTION MONITOR PAINFUL?

There may be slight discomfort during skin preparation (with hydrogel electrodes – similar to an assertive rub), and as the electrodes are placed (with low impedance electrodes - similar to a slight pinch). Cerebral function monitoring itself is painless.

HOW LONG WILL YOU MONITOR MY BABY'S BRAIN?

The length of monitoring will depend on your baby's condition. Your baby's doctor will keep you updated as to your baby's progress and the potential need for continued monitoring.

CAN I DO ANYTHING TO HELP?

YES. It is very important your baby remain quiet during brain monitoring. Try to keep interruptions to a minimum and work with your baby's nurse to coordinate care (changing diapers, etc.). Help to keep your baby quiet with your soothing voice and gentle touch.

WHERE CAN I FIND MORE INFORMATION ABOUT CEREBRAL FUNCTION MONITORING?

To find out more about cerebral function monitoring, please contact a member of your baby's medical or nursing team.



This information is provided for educational purposes only. It should not be used as a substitute for medical care and the advice of your healthcare provider.