

Cerebral Function Monitoring

What is a Cerebral Function Monitor?

A Cerebral Function Monitor (CFM) is a

special bedside monitor that records brain activity continuously. It was originally designed to monitor the brain in adult patients in intensive care, but over the past

20 years it has proved to be a very useful tool for monitoring the brain in newborn babies. It can also be helpful in some older infants and children.



Why is my child having Cerebral Function Monitoring?

The doctors treating your child consider that it may be helpful to monitor your child's brain function more closely usually for a period of 12-24 hours as part of their observations. The CFM recording will assist those looking after your child. The monitoring often helps to show if a child is having abnormal electrical activity such as seizures. If no abnormalities are seen on the trace this helps provide early reassurance for all. The monitoring helps us to know how your child is responding to treatments given, including any medications if needed. If you wish, the doctors will explain in more detail why monitoring using CFM may be useful in your own child's particular case.

What does it involve?

Several thin wires (electrodes) will be put on the scalp, each fixed on using either a gel sticker, a small metal cup, or a very fine needle just under the skin. A special glue or band will help hold them in place. If needles are used, sucrose (sugar solution) may be given by mouth first to minimize any discomfort; they are painless once secured in place. The electrodes do not send electricity into your child's head; they simply record activity from the brain.

For how long will my child be monitored?

The duration is usually 12- 24 hours, depending on the reason your child is having CFM, but may be extended if deemed necessary by the medical team. If your child needs

any special treatments (e.g. cooling and/or anticonvulsant medicines) then monitoring might continue for a few days.

When will I know what the results of the monitoring are?

The machine provides an image from the continuous recording of the brain's electrical activity. After a period of time we can review the pattern to see whether it shows a normal or abnormal pattern and whether any changes in the electrical impulses show seizures. If a specialist is not at hand to review the trace straight away, the images will be seen as soon as possible. If the trace appears normal you will be told about this for reassurance. If the tracing suggests that your child is having electrical seizures or other abnormality then this will be discussed with you by the medical team. A more detailed electrical brain wave tracing (a formal electroencephalogram; EEG) may then also be requested by your child's treating doctors.

What happens to the CFM recording?

The trace forms part of your child's confidential medical record so it will be securely stored in line with the patient Records Keeping Policy. The electronic recording will be saved onto the hospital's secure computer systems for future review as needed by authorised NHS staff.

If you have any questions please don't hesitate to ask a member of staff.