



Manchester Royal Infirmary

Ambulatory EEG

Neurophysiology Department
0161 276 4564



What Is An Ambulatory EEG?

- EEG stands for electroencephalogram.
- An EEG is a simple and painless test in which the electrical activity of the brain (sometimes called brain waves) is recorded from the scalp.
- Usually an EEG is recorded over 20 minutes while you stay in the Neurophysiology Department. However in some circumstances it needs to be recorded for 24 hours, during which time you go home with a small recording box. This is what is meant by the term Ambulatory EEG.
- Ambulatory EEGs can be performed on people of all ages and are completely safe.

Why Do I Need An Ambulatory EEG?

People are referred for an Ambulatory EEG for a variety of reasons. Most often, an Ambulatory EEG is used in the investigation of people who have very frequent seizures (fits) or blackouts, or when these occur at night time.

The Ambulatory EEG test

Before the Ambulatory EEG

- No special preparation is needed before the Ambulatory EEG; you should take any medication as prescribed and eat and drink as normal. It is helpful however, if you can come with clean hair that is free from styling products.
- Additionally, you are advised to bring a hat or wear a coat with a hood with you for when you leave the department.

During the Ambulatory EEG

- On the day of your appointment you will be in the Neurophysiology department for around 90 minutes and you will see a Clinical Physiologist.
- Firstly you will be asked some questions about your medical history (mainly about your symptoms and medication) and the test will be explained fully. You will also have chance to ask any questions that you have.
- Next, your head will be measured and small metal disks called electrodes (see picture) will be placed at specific points using a special type of paste and glue. In total, 23 electrodes will be applied. Two stickers will also be attached to your shoulders so that we can record your heart rate. This process will take around 30 – 40 minutes altogether.
- Once all of the electrodes have been applied a baseline EEG will be recorded for 20 minutes. For this you will be asked to get comfortable and sit quietly in a relaxed state. You will be asked to open your eyes every few minutes, but for most of the time you will be asked to keep your eyes closed.
- Part way through the baseline EEG you may be asked to perform a deep breathing exercise and to look at a flashing light. These things are called Activation Procedures and can help reveal further information about your brain. (These are explained more fully on page 5).



During the Ambulatory EEG (continued)

- Once the base line EEG has been recorded the Ambulatory EEG study will be begun and you will be given a small box to which the electrodes are attached to take home with you (see picture).
- The box is small and fits neatly onto a belt around your waist or bag over your shoulder. It is not heavy and though it may be a little inconvenient, it should not cause you too much trouble.
- While you are wearing the Ambulatory EEG you should try to go about your normal business as much as possible. However we do ask that you **avoid chewing gum and sucking sweets** as this can affect how well the EEG records and you **must not get the box or the electrodes wet**. Additionally you will be given a diary card in which to record your activities. It is very important that you complete this fully in order to get the best results from the test.
- You will keep the Ambulatory EEG on overnight and then return to the Neurophysiology Department the next day to have all of the electrodes removed and your hair cleaned of the glue. Because of the paste and the glue used your hair may feel a little sticky, but it will come clean when it is washed properly.



After the Ambulatory EEG

There are no side effects or after effects from the Ambulatory EEG and you can go home and carry on with school or work as usual once it is finished.

Activation Procedures

One or two activation procedures may be performed during the baseline EEG, depending on your age and symptoms.

Deep breathing

The first procedure is a deep breathing exercise. You will be asked to take deep breaths for about three minutes. This can cause light headedness or tingling in the fingers and lips; this is normal and will quickly pass when your breathing returns to normal. Occasionally, certain types of seizures may be provoked by the deep breathing exercise; however the Clinical Physiologist will closely monitor you and your EEG at all times.

Flashing lights

The second procedure involves looking at a bright flashing light and opening and closing your eyes. This is an important part of the test because some types of seizures and blackouts may be caused by flashing lights. Very rarely, in people who are very sensitive to lights, this may cause a seizure, however, again, the Clinical Physiologist will closely monitor you and your EEG and will stop the light if you appear to be sensitive.

Both of these procedures will be fully explained by the Clinical Physiologist during your EEG, and any concerns you may have can be discussed with them.

Frequently Asked Questions

Should I stop taking my medication?

No. You must continue to take all of your medication as usual before the test, and while you are wearing the Ambulatory EEG.

Will I get the results straight away?

No. It takes some time to review your Ambulatory EEG and this is done by a Consultant Neurophysiologist. A report of the findings will be written and sent to the doctor who referred you, who will then contact you with a follow up appointment and discuss the results with you there.

Why is the diary important?

The diary is very important, because different activities can affect what your EEG looks like. If we do not know what you are doing then there is a risk that activity we see may be misinterpreted. By keeping an accurate diary then the Ambulatory EEG gives the best results.

What will I look like?

Because the leads attach to your head, you may look a little unusual. It is a good idea to wear a coat with a hood or a hat or scarf to cover them if you are concerned.

What if I have a seizure during the Ambulatory EEG?

The Ambulatory EEG records the electrical activity from your brain that is produced naturally. It does not make you more likely to have a seizure or fit. If you do have a seizure while wearing the Ambulatory EEG then you should respond and seek treatment as you normally would.

Further Information About Ambulatory EEGs

The department is open Monday to Friday between 8.00am and 5.00pm. If you require further information about Ambulatory EEG or neurophysiology then feel free to call us on **0161 276 4386** or **0161 276 4564**. Alternatively you could consult:

Hospital website: www.cmft.nhs.uk

NHS direct website: www.nhsdirect.nhs.uk

Contact Details

Neurophysiology Department

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Getting to the Neurophysiology Department

The Neurophysiology Department is located on the **Ground Floor** in the Manchester Royal Infirmary. The closest entrance to the department is **MRI Entrance 2** located on the hospital Boulevard.

There are two multi-storey car parks at the hospital (Hathersage Road and Grafton Street). You should allow 10 to 15 minutes to get from the car parks to the Neurophysiology department.

Parking for patients who require access to Drop-off areas (30 minutes maximum) is also available. These areas are barrier controlled and accessed from the Hathersage Road entrance, which is signed "Access for Drop-off and Blue Badge Holders only".

If you require ambulance transport to the hospital then you should arrange this with your GP as soon as you know your appointment date.

Zero Tolerance Policy

We are committed to the well-being and safety of our patients and of our staff. Please treat other patients and staff with the courtesy and respect that you expect to receive. Verbal abuse, harassment and physical violence are unacceptable and will lead to prosecutions.

No Smoking Policy

Please protect our patients, visitors and staff by adhering to our no smoking policy. Smoking is not permitted in any of our hospital buildings or grounds, except in the dedicated smoking shelters in the grounds of our Central Manchester site.

For advice and support on how to give up smoking, go to <http://www.nhs.uk/smokefree>.

Translation and Interpretation Service

It is our policy that family, relatives or friends cannot interpret for patients. Should you require an interpreter ask a member of staff to arrange it for you.

تتص سیاستنا علی عدم السماح لافراد عائلة المرضى او اقاربهم او اصدقائهم بالترجمة لهم. اذا احتجت الى مترجم فيرجى ان تطلب ذلك من احد العاملين ليرتب لك ذلك.

ہماری یہ پالیسی ہے کہ خاندان ، رشتہ دار اور دوست مریضوں کے لئے ترجمہ نہیں کرسکتے۔ اگر آپ کو مترجم کی ضرورت ہے تو عملے کے کسی رکن سے کہیں کہ وہ آپ کے لئے اس کا بندوبست کر دے۔

ইহা আমাদের নীতি যে, একজন রোগীর জন্য তার পরিবারের সদস্য, আত্মীয় বা কোন বন্ধু অনুবাদক হতে পারবেন না। আপনার একজন অনুবাদকের প্রয়োজন হলে তা একজন কর্মচারীকে জানান অনুবাদকের ব্যবস্থা করার জন্য।

Nasze zasady nie pozwalają na korzystanie z pomocy członków rodzin pacjentów, ich przyjaciół lub ich krewnych jako tłumaczy. Jeśli potrzebują Państwo tłumacza, prosimy o kontakt z członkiem personelu, który zorganizuje go dla Państwa.

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我们的方针是，家属，亲戚和朋友不能为病人做口译。如果您需要口译员，请叫员工给您安排。



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