

CLINICAL SKILLS: EXPLAINING EPILEPSY

Example OSCE station: You are a house officer in the outpatient neurology clinic. You are asked to see a 23 year old fashion model, who was diagnosed with having epilepsy 6 months ago. Since this time, she has been having an increasing number of fits. Please discuss the possible changes she may need to make to her lifestyle, and the pro's and con's of medication.

What is epilepsy?

- Epilepsy is a relatively common medical illness - occurs in 10 per 1,000 people
- It is associated with an increased tendency to have seizures, or fits. This is caused by abnormal electrical activity in the brain, leading to sensory or motor (movement) signs
- There are many different forms of epilepsy, which are related to where in the brain the abnormal electrical activity is
- Patient's symptoms vary widely, and the number of seizures they have vary as well
- Epilepsy is most likely to occur either first in childhood, or after the age of 65
- There are certain precipitants of seizures in epileptic patients, which are different for each patient. These include; flashing lights, strong emotion, lack of sleep, menstruation, hyperventilation and a recent febrile illness

What causes epilepsy?

- Often there is no one specific cause found in patients with epilepsy
- Sometimes it may be due to problems with developmental growth, even before you are born. This may include problems during your labour, cerebral infection, or a bang on the head as a young child
- There are other more specific causes that are found in some patients, such as; tumour, alcohol intoxication or withdrawal, certain drugs (e.g.: diazepam), hypoglycaemia, brain abscesses or infection, and trauma to the head

What treatments are available for epilepsy?

- **Social:**
 - Firstly, it is important to address lifestyle changes to reduce the number of seizures a person is having. These lifestyle changes include:
 - Reducing alcohol intake
 - Stopping any illicit drug abuse
 - Reducing potential life stressors (if possible)
 - Regular meals
 - Good 'sleep hygiene' (regular, good quality sleep)
 - These actions may mean you do not need to take drug therapy
- **Psychological:**
 - Support and counselling
- **Medical:**
 - The drugs available are called 'anticonvulsants', and common drug names include; valproate, carbamazepine and phenytoin. They may be taken singly or in combination

- The drug given to you will depend on the type of epilepsy you have. Side effects of these drugs vary, but include; rash, tiredness, decreased folate levels, and abnormal blood cell levels
 - You may therefore need to take blood tests before starting, and during taking the medication. It is important to note that the medication may reduce the number of fits you have, but not stop them completely
 - Valproate: An anticonvulsant used in most cases. It acts by blocking sodium and calcium channels. Side effects include; hair loss (10%), weight gain and leucopenia. It is usually not used in women who may want to become pregnant due to its effect on the unborn foetus
 - It is important that you take your medication regularly to reduce the risk of having breakthrough seizures
 - Carbamazepine can interact with other medications, most notably the oral contraceptive pill and warfarin. If you are on these drugs, you must consult your doctor. The oral contraceptive pill may need to be used at a higher dose to maintain the safe effect
- **Epilepsy responds to treatment about 70% of the time**
- **Pregnancy:** It is also important to note that these drugs tend to be harmful to the baby in pregnancy, so if you are planning on becoming pregnant, please speak to your GP before you do so in order to discuss the pro's and con's of continuing treatment. It is also advised to take folic acid supplements in the first 12 weeks of pregnancy, as your drugs may reduce levels of this
- **Surgical:** when epilepsy is not well treated with medication and where there is a clear structural cause found in the brain, sometimes it is appropriate to undergo neurosurgery to try to remove the cause. This can have longlasting effects on memory and patients are usually very carefully investigated before considered for surgery

Will I have to stop driving?

- Once you are diagnosed with epilepsy, it is important to inform the DVLA. Unfortunately, until you have been seizure free for 1 year, you will not be able to drive

Will this diagnosis affect my job?

- This depends on what you do for a living. For example, people working with heavy machinery will no longer be able to work in this field. Jobs requiring driving heavy goods vehicles require patients to be seizure free for 10 years with no medication. Any jobs in entertainment (including modelling) may put you at risk of exposure to flashing lights which is a recognised precipitant of seizures in some epileptic patients. With most jobs, a diagnosis of epilepsy should not affect you and you should be able to continue working as normal

Is there anything else I need to know?

- **Sports and leisure:** People with epilepsy can participate in most sports, with informed, qualified supervision and, where appropriate, the relevant safety precautions. It is advised not to swim alone
- **Heat:** Do not use open fires. Think about the design of the kitchen. A microwave oven is much safer than a conventional oven, hot plate, or kettle. Always turn pan handles towards the back of the cooker. Take the plate to the pan, not a hot pan to the plate

- **Water:** Showers are safer than baths. If you do not live alone, tell someone if you are having a bath, turn off taps before you get in, and leave the door unlocked. Keep bath water shallow. Do not bath a baby alone. When you swim, do it with someone else, and not far away from dry ground
- **Heights:** Make sure there are sufficient guards or rails in any high situation. Consider a rail at the top of your stairs. It is best not to climb ladders
- **Sharp furniture:** Safety corners are available to cover sharp edges. Perhaps consider soft furnishings around the home as much as possible.
- **Glass:** Consider fitting safety glass to any glass in doors or to low windows

What is the prognosis?

- Most people with epilepsy lead outwardly normal lives. While epilepsy cannot currently be cured, for some people it does eventually go away

To conclude the consultation:

- Ask if the patient has any questions and if they would like to go over anything again (make sure you leave adequate time for this)
- Offer the patient written information to take home and give them a link to [Epilepsy Action](#), a national epilepsy charity
- Thank the patient.