



Epilepsy Case

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Conflits d'intérêts aucun.

Case History

- a 21 year old man gives a history of:
- A seizure associated with high fever at the age of 5
- Repeated afebrile seizures starting at age 8
- Treated with Phenobarbital, seizures controlled
- Medicine stopped at age 11
- Seizures returned at age 17
- A vacant stare, lipsmacking, fumbling of his hands.
- Last 1 minute, followed by 2 minutes confusion
- Occur twice per week despite good doses of Phenobarbital, Phenytoin, Carbamazepine
- EEG shows right temporal spikes
- He is right-handed

Question n° 1:

What should be done next?

1. CT scan
2. MRI scan
3. PET scan

Question n° 2:

What does the MRI show?



Fluid attenuated inversion recovery (FLAIR) (FLAIR)

Question n° 3:

What should be done next?

- Try another drug like lamotrigine
- Try the ketogenic diet
- Try VNS
- Consider for temporal lobe surgery



Answer of the quiz

- Answer question n°1

MRI is a very important diagnostic tool. It is much more sensitive than CT in epilepsy. PET should only be done if MRI is normal.

- Answer question n°2

Increased FLAIR signal. This is very characteristic of mesial temporal sclerosis.

- Answer question n°3

The best plan:

- Another drug has only a small chance of helping because 3 good drugs already have been tried.
- The new AEDs are no more effective than the old one, although they may have less toxicity.
- The ketogenic diet is not used in adults with temporal lobe epilepsy
- VNS has a small chance of making a patient seizure-free.
- Temporal lobectomy is the best choice in this patient. The chance of becoming seizure-free is about 60%; additional patient will have a marked reduction in seizures. Since the patient is right-handed with a right temporal focus, effects on language and memory are likely to be mild. Neuropsychological testing can be done before surgery.