Seizure Response and First Aid

Josiah Ambrose, MD

UCSF Epilepsy Fellow

Convulsions: before it starts

- Is the bedroom/bathroom safe?
- Recommend an ID bracelet or tag
- Do you typically have time to move to a safe location before a convulsions starts?

Convulsions: activities for patients to avoid

- No working in high places (eg. roof)
- Avoid swimming (should never be done without close supervision)

Convulsions: what *not* to do

- Freak out
- Put a wallet in the mouth
- Put fingers in the mouth
  - No one has ever swallowed their tongue
- Restrain the patient

Convulsions: what to do

- Move away any dangerous objects
- Loosen clothing around the neck
- Protect the head
- Time the event whenever possible

Convulsions: what to do

Convulsions: the silver lining!

- Seizures end
- >90% will stop spontaneously
- Majority of seizures end in less than 60 seconds.
- Many patients will become cyanotic (turn blue). Almost all will resume breathing normally (“pink up”).

Convulsions: what to do (beyond safety)

- Primary goal is maintaining safety
- If possible, take note of how the patient is moving (left or right side moving at onset, eyes pushed one way or another)
- If the patient is safe, capturing the seizure on video can be very helpful to the physician.

Do I call an ambulance?

- It depends:
- Significant injury?
- Convulsion exceptionally long or unusual for the patient?
- Patient not waking up like usual?
- Any convulsion lasting > 5 minutes requires a trip to the hospital

Convulsions: what to do afterwards

- Stay with the patient
- Turn them on their side (vomiting risk)
- Make sure they wake up/improve
- Make sure effective breathing is restored
- Help orient the patient
- History of seizure clusters?
- Some patients have exploratory or dangerous behavior afterwards (“post-ictal behavior”).

Convulsions: what to do afterwards

- Should the patient take more of their medication?

Convulsions: what to do (hospital)

- Manage secretions with suctioning
- Describe the event out loud if the patient is on video monitoring
- Don’t stand in front of the video camera
- When the seizure is over do basic neurology testing: naming, repetition, pronator drift, finger and toe taps.
- If the patient is verbal during the seizure, ask a memory question: “remember ‘purple dinosaur’”

Non-convulsive seizure

- Usually not dangerous, but in many patients can progress to a seizure.
- Can be difficult to notice: patient staring off, behavioral arrest, lip smacking, repetitive movements (“automatisms”)

Aura

- Usually retained consciousness
- Again not usually dangerous, but can often proceed a convulsion
- Abortive medication for some patients
  - Lorazepam or diazepam

Preventing the next convulsion

- Record the seizure in a diary or epilepsy.com
- Contact your MD if you think that current mediations are insufficient
- Eliminate known triggers: sleep deprivation, alcohol, flashing lights, etc.

Questions?