ED QUICK QUIZ

WHAT IS THE DIAGNOSIS?

BACKGROUND & QUESTIONS

The standby phone rings and the paramedics are bringing in a 24 year old male who is currently having a seizure. He has been fitting for the last 10 minutes and has been given 20mg rectal diazepam by SAS. There is no obvious head injury. He is a known epileptic.

Observations

- BP 126/84
- Pulse 114
- RR 20
- Oxygen saturations 100% on 15 litres NRM
- Temp 37.4 ^{o}C

They are 5 minutes away.

1. **What do you want in preparation for his arrival?**

He is brought straight into the resus room still seizing.

2. **How will you assess him?**
3. **What immediate treatment does he require?**

He continues to seize despite this treatment and has now been having a seizure for 20 minutes.

4. **When do you consult ICU?**

ANSWERS & DISCUSSION

1. **Preparation**

   Inform the ED team of the presentation and ensure you have a Middle grade or Consultant in the resus team.

   Inform the nursing staff in resus that a patient is about to arrive that is still seizing.

   Prepare your equipment – Monitoring: BP cuff, oxygen sats probe, ECG leads,
   Thermometer, capnography
   BM machine
   2 cannula trays with green or grey cannulas
   IV saline infusion line
   Drugs: IV Lorazepam (4mg/4ml)
   Airway equipment: Suction
   2 working laryngoscopes
   MAC 3 & 4 blades
   ETTs

   Allocate team roles- team leader, airway, IV access, assessment.

2. **Assessment**

   The assessment is always the same : ABCDE

   Airway is a priority as it may be obstructed by his tongue, blood or secretions. Never put your fingers in the mouth. Use jaw thrust to maintain his airway and suction his oropharynx (only as far as you can see). Ensure high flow oxygen with capnography applied.

   Insert 2x large bore cannulae.

   Remember to check a blood sugar level (are they having a seizure due to hypoglycaemia) and a VBG (lactate & hydrogen ion concentration with sodium & potassium level are important). Send urgent bloods for FBC, clotting, U&Es, LFTs, Bone, Magnesium & antiepileptic drug levels (if appropriate).

Although he is known to have epilepsy, ensure he does not have another cause for his seizure. Check there are no signs of head injury, PEARL, BSL, temperature & consider urine toxicology screen. Does he require a CT head?

3. **Immediate treatment**

   Lorazepam IV 0.1mg/kg (usually 4mg) or diazepam IV 10mg. Repeat after 10 minutes if continuing to seize.

   If seizures continue despite lorazepam then commence a phenytoin infusion. The dose is 18mg/kg at <50mg/minute. The clinical handbook has a quick reference table based on weight & is in the drug preparation area in resus.

   Consider IV Pabrinex (2xI+II) or IV Mg SO_4 (2g) if any suggestion of alcohol abuse or malnutrition.

4. **ICU consult**

   ICU should be paged after the patient has been seizing for 30 minutes or if they have an obstructed airway. At this point a Rapid Sequence Induction (RSI) & intubation should be considered to protect the airway & terminate the seizures.

   It is helpful to have a RSI checklist & the difficult airway trolley at the bedside for their arrival. The ICU doctor on call should bring IV induction medications with them, however it is useful to ask the nursing staff to prepare a 50ml syringe with 2% propofol & syringe pump for post intubation.