

18 year old right handed female

PC

- Loss of consciousness

HPC

- Witnessed blackout whilst at work
- No warning prior to blackout
- Came around with people around her, felt dazed and confused – people told her she'd 'had a fit'
- Incontinent of urine, no tongue biting
- Can't recall the ambulance arriving but does recall being in ambulance on way to hospital
- Otherwise well, had been out evening before celebrating a friends birthday – had 2 glasses of wine and went to bed at 3am
- Reports over last few years recurrent episodes where her arms will suddenly 'jump', particularly in morning and she has dropped her toothbrush secondary to this

PMHx

- Nil

THx

- Oral contraceptive pill
- NKDA

PSHx

- Nil

SHx

- Works as a hairdresser
- Non-smoker

Examination

Appears well

BP 110/68

HR54

I+II+O



Afebrile

Sats 99%

o/a

RR 14



Cranial Nerves

	R	L
I	N	N
II	N	N
III, IV, VI	N	N
V	N	N
VII	N	N
VIII	N	N
IX, X, XI	N	N
XII	N	N

Upper Limb

	R	L
Tone	N	N
Sh Ab	5	5
EF	5	5
EE	5	5
WE	5	5
FE	5	5
FDI	5	5
APB	5	5

Lower Limb

	R	L
Tone	N	N
HF	5	5
HE	5	5
KF	5	5
KE	5	5
APF	5	5
ADF	5	5
AI	5	5

	R	L
Cerebellar	N	N
Pin Prick	N	N
JPS	N	N
Vib	N	N

Biceps	++	++	Knee	++	++
Triceps	++	++	Ankle	++	++
Supinator	++	++	Plantar	↓	↓

**Witness account provided by colleague:**

I first became aware of problem when she had fallen to the floor making a loud bang. She fell on her side and went stiff and then started to shake, both of her arms and legs were shaking together. She was making a grunting sound and I was concerned and her lips were turning blue. She was shaking for about 2 minutes before she stopped but we couldn't get any response from her for at least 10 minutes as she was sleeping.

**Stop and think**

- 1. What is the differential diagnosis of transient loss of consciousness and what clinical features can help distinguish between them? Based on the available information what is your suspected diagnosis?**
- 2. What investigations should you consider when assessing this patient in the Emergency department?**

**Investigations**

**Bloods**

Hb	141
MCV	85
WC	6.2
Plt	189

Na	141
K	4.5
Ur	4.1
Creat	52
CRP	5

ALT	26
Alk P	65
Bili	4
Alb	39
INR	1.0

Calcium	N
Magnesium	N

**Radiology**



Normal CT unenhanced CT head scan

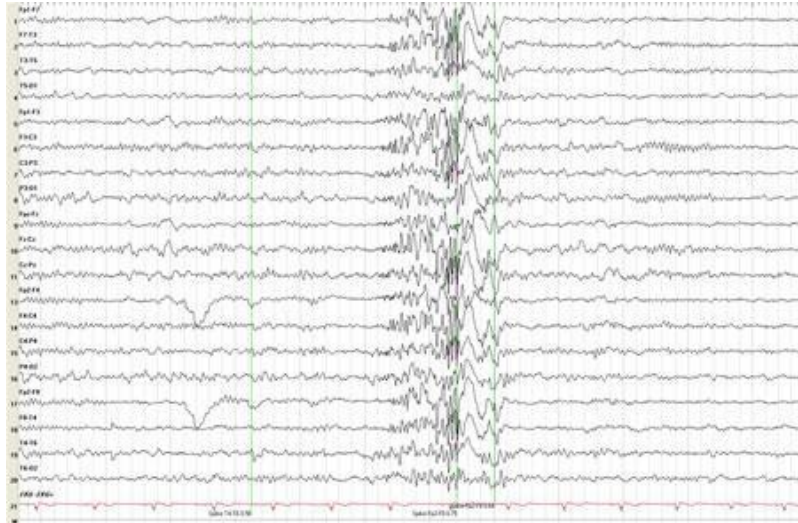
**Stop and think**

- 3. Based on your suspected diagnosis what advice would you give the patient with regards to driving and safety?**

4. What is the role of EEG in this case?

5. Are there any treatment considerations at this stage?

### Neurophysiology



EEG demonstrated 4-6Hz generalised polyspike and wave discharge in resting patient

**Diagnosis: Presentation of tonic clonic seizure, diagnosis of Juvenile myoclonic epilepsy**