Coma and LOC

Dr Matt Rowland
Clinical Lecturer in Anaesthetics and Intensive Care
University of Oxford

Aims

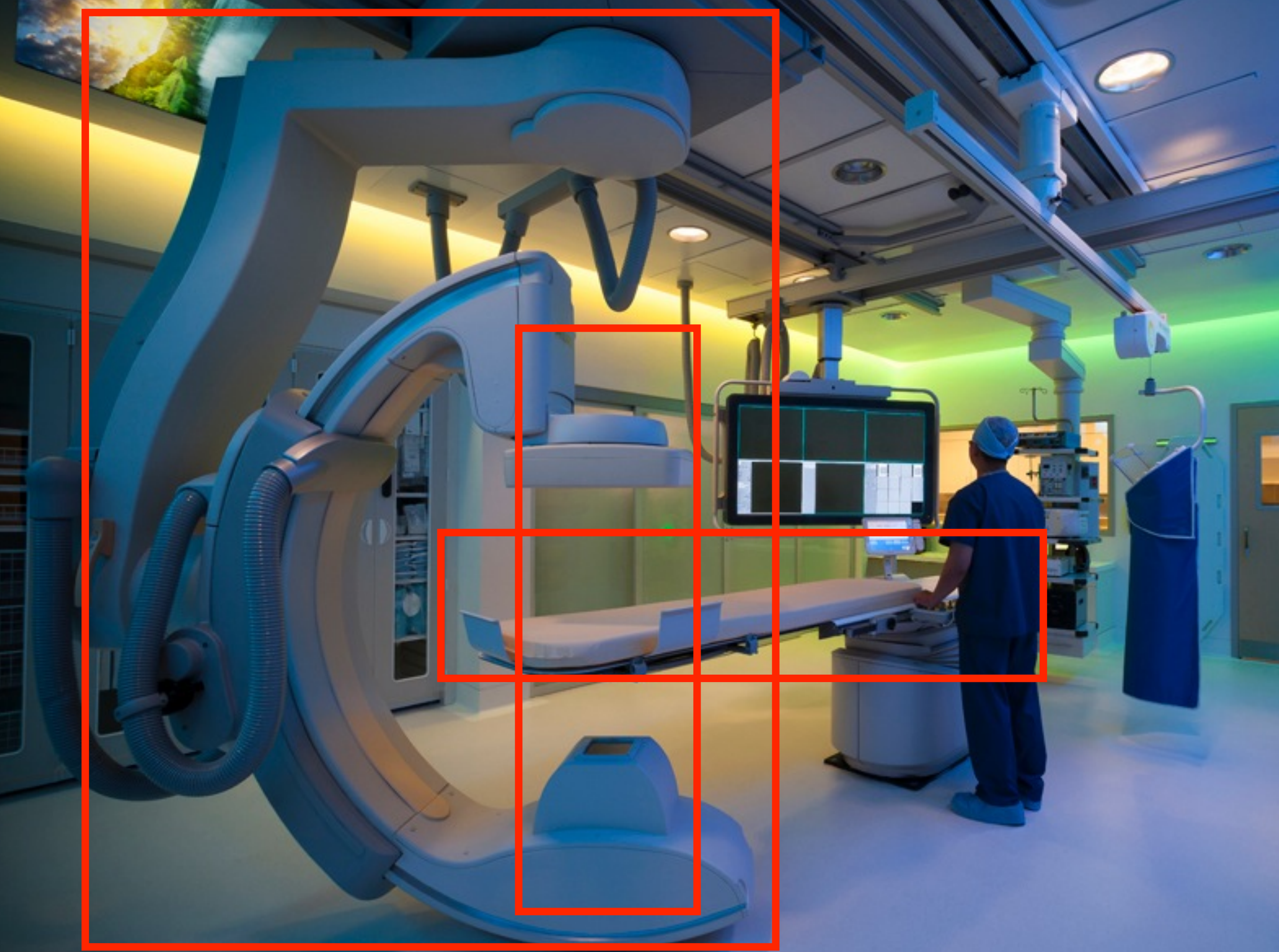
- Discuss issues with LOC in neuroradiology
- Review possible causes
- Discuss management options

What this wont be:

- Rehash of all the lecture notes…..

DOI:

I am not a neuroradiologist



SAFE

THEATRE/OR

ANGIO
SUITE

MRI
SCANNER

UNSAFE

ROADSIDE

“How can we objectively assess level of consciousness?”

What was it like before?

Eye Response	
Action	**Score**
Opens eyes spontaneously, tracks, blinks to command	4
Opens eyes, does not track or blink to command	3
Eyes closed; open to loud voice	2
Eyes closed; open to painful stimulation	1
Eyes remain closed following painful stimulation	0
Motor Response	
Action	**Score**
Obeys, makes sign, e.g., "thumbs up"	4
Localizes painful stimulus	3
Flexes to painful stimulus	2
Extends to painful stimulation	1
No response	0
Myoclonic status epilepticus	0
Brainstem Reflexes	
Action	**Score**
Pupils +, corneals +, cough +	4
1 pupil unreactive, corneals +, cough +	3
Pupils -, corneals +, cough NA	2
Pupils +, corneals -, cough NA	2
Pupils -, corneals -, cough +	1
Pupils -, corneals -, cough -	0
Intubation	
Action	**Score**
Not intubated, normal respirations	4
Not intubated, Cheyne-Stokes respirations	3
Not intubated, irregular respirations	2
Not intubated, apneic	0
Intubated, breathes above ventilator settings	1
Intubated, breathes below ventilator settings	0

Legend: + = present, - = absent. Each category has a maximum of 4 and a minimum of 0. The results of each category are added together for the total FOUR score.

Four Score

GCS

AVPU

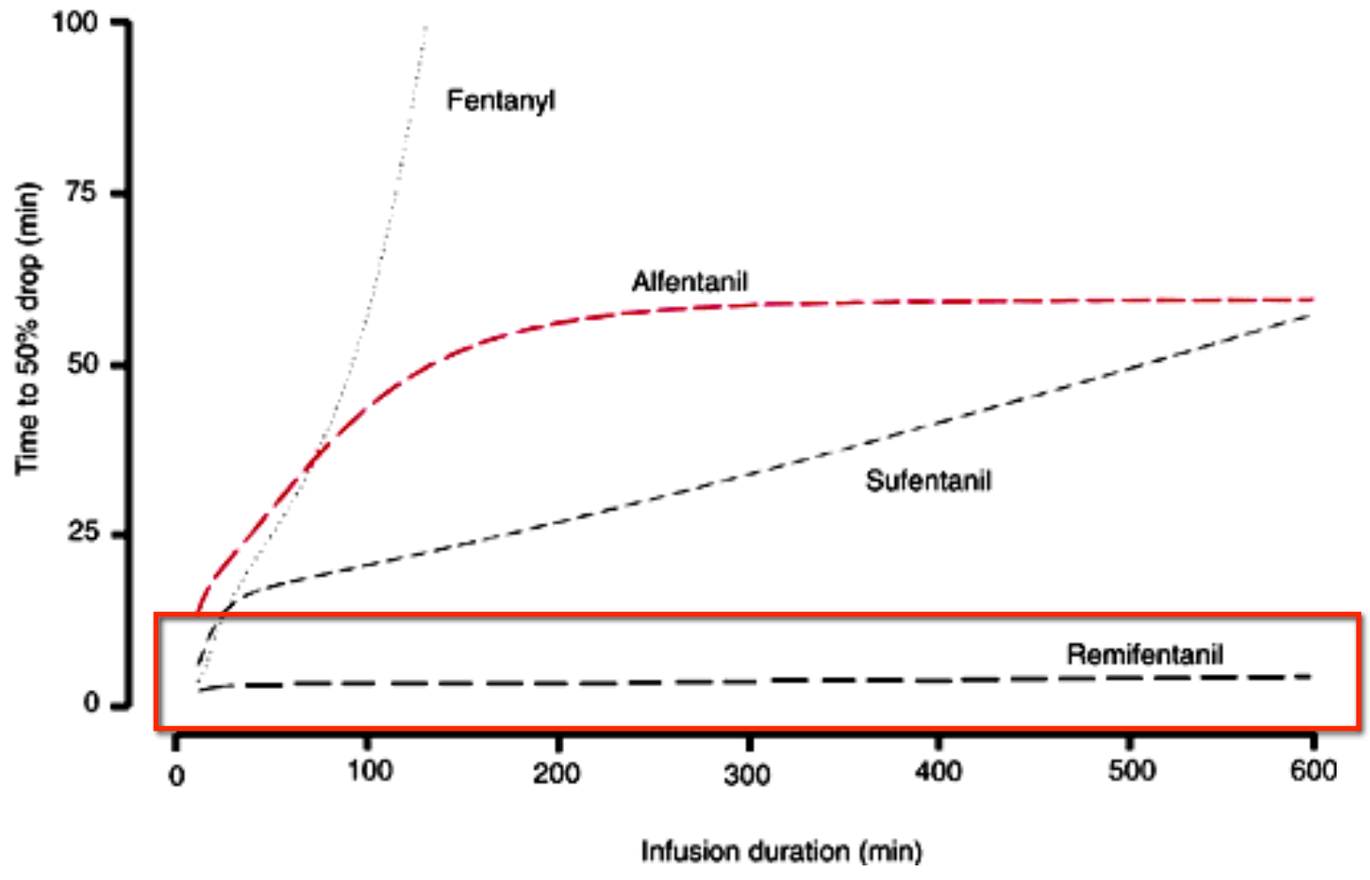
What are the causes?

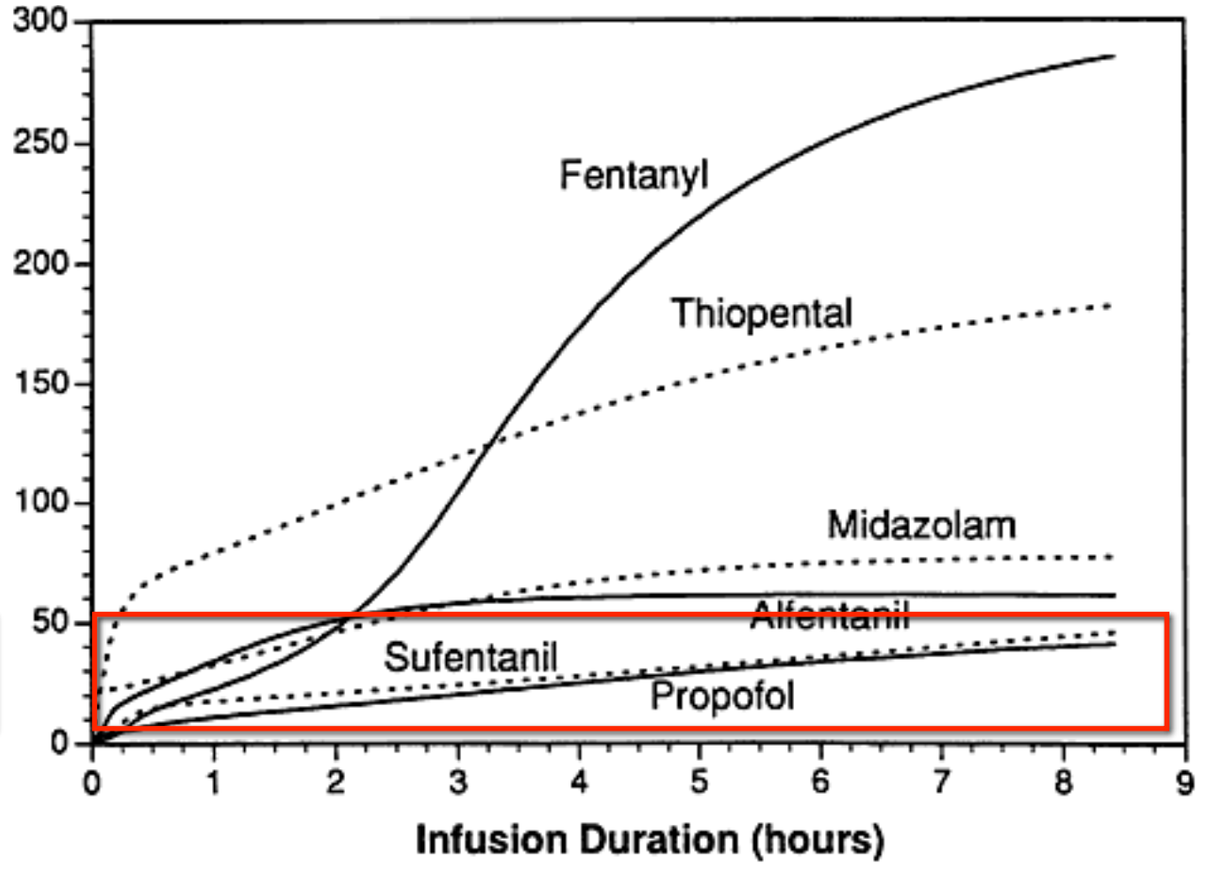
**If the patient wakes up with a new hemiplegia…….
…..it's not the anaesthetic drugs**

Procedural	Patient	Anaesthetic
e.g. re-bleed, thrombosis	e.g. blocked EVD, DCI	e.g. PCO_2 opioids

Further imaging

Context-sensitive half-life





Delayed Cerebral Ischaemia

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Vasospasm

Vergouwen et al. 2010 Stroke

Management

Oxygen - (probably)

Airway — Guedel/NP

Breathing — BVM ventilate/ABG
Consider LMA/iGel
When to intubate

Disability — GLUCOSE

Exposure — Check groin

Any Questions?