Please note – this learning resource has been produced by the GUMS Academic Team. It is possible that there are some minor errors in the questions/answers, and other possible answers that are not included below. Make sure to check with other resources.

**Key elements of the answers are bolded. Everything else is important but not the focus of BMB.**

**CASE 1 - Stroke**

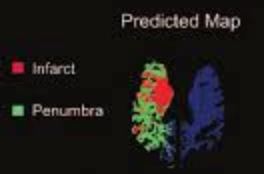
A 65 year old gentleman, Mr Thom Lysis, presents to ED with his wife at 7pm following new onset weakness in his face and arm on the right side of his body.

1. What do you immediately do?
2. What is the rtionalefor doing an ECG in stroke?

1. List some differential diagnoses
2. Take a brief history of the patient and his wife. State what you would examine. Based on this information, state the most likely affected artery.
3. What is the specific scan you NEXT order and what is the SINGLE most important reason for this scan?
4. Comment on the findings in the CT and state what you would look for in the plain CT.



**\*\*see amboss - ischemic stroke (diagnostics) for some more interpretation with images\*\***

1. The next part is for interest - it always happens as part of the work up for stroke, but would unlikely be tested in BMB papers:
2. If the patient’s scan had evidence of mostly necrosed tissue, would you lyse them?
3. Which of the following is NOT a contraindication for thrombolysis
   1. Intracranial haemorrhage on imaging
   2. Previous stroke within last 3 months
   3. Active bleeding
   4. Uncontrolled Hypertension of 150/90 mmHg
   5. Hypoglycemia

Thrombolysis is done, but the intern who did it was from UQ and accidentally gave them heparin instead. They infarct.

To summarise, their signs are:

* Paralysis of right face and arm but not leg
* Can’t look right (looks towards the side of the lesion i.e. can only look left, but not right)
* Can’t get words out but understands commands

1. Name the precise MCA branch involved.
2. What structures have been affected? What else does the examiner have to look for (although given that he has aphasia, he can’t tell you this sign!) - assuming the left hemisphere is his dominant
3. If it was an inferior division infarct, what structures and signs could have been involved/seen? How about M1 infarct?
4. State the main difference between M1 and M3 infarcts (5-10 words)

**WHAT IF’S …..**

1. **What if** the patient had evidence of swelling and ipsilateral mydriasis? What other signs could they develop if this was not treated?
2. **What if** Mr Thom Lysis came in with a headache that was worsening within minutes and he was also vomiting?
   1. What risk factor does Mr Lysis have for this? -
   2. List other possible causes
3. **What if** it was an ACA stroke? List clinical features.

**CASE 2 - Head Injuries**

24 year old Rona Vires is brought into the ED after getting into a fight over toilet paper outside his local woolworths. He appears to be disoriented, and there are cuts and bruises all over his face and he is bleeding. The Paramedics give you a handover which reveals he was punched in the jaw several times before he fell onto the cement face first.

1. What are the first steps in managing this patient?
2. What are you looking for in a cranial CT in head traumas?

Rona is taken in for a CT scan (image shown). Upon further physical examination you notice that he has bruising around the eyes (“racoon eyes”), has rhinorrhea and there is a double ring “Halo” sign on the bed sheets. 

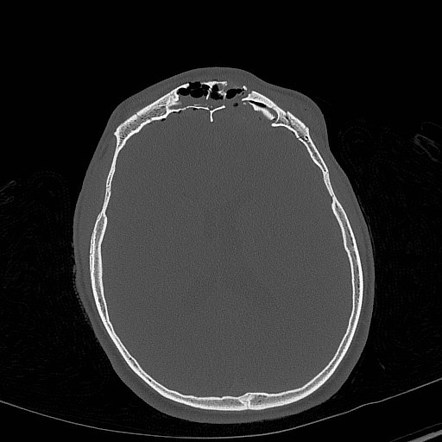
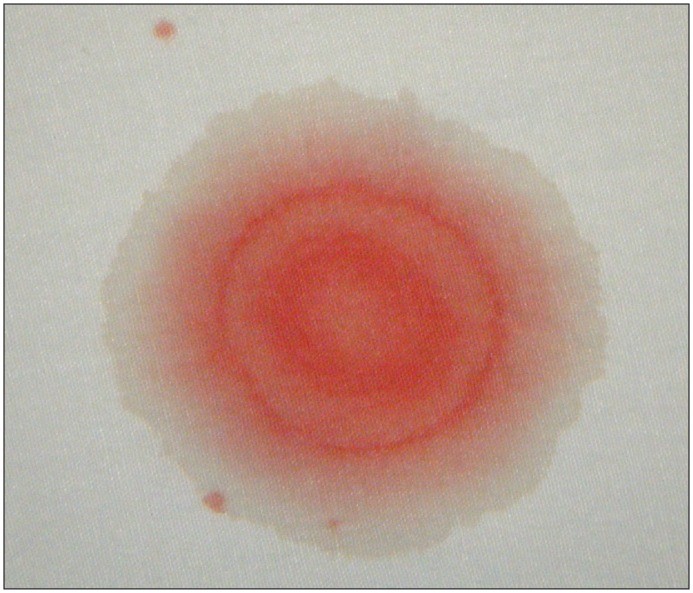


Image from: radiopedia - base of skull fractures

1. What is a double ring “Halo” sign?

1. What is the anatomical reason behind him getting the racoon eyes
2. What fracture does Rona most likely have?
3. What are simple vs compound fractures

**What ifs**

1. What if Rona presented with dysphagia, loss of gag reflex, weakness of the sternocleidomastoid and trapezius muscles?

**Please provide feedback for this case at:** [**https://gums2020.typeform.com/to/e0h7US**](https://gums2020.typeform.com/to/e0h7US)