ED QUICK QUIZ
WHAT IS THE DIAGNOSIS?

A 32 year old female attends the ED due to a facial droop.

She thinks this started last night but when she woke up this morning the left side of her face was completely weak. She also feels a bit unsteady on her feet.

She has no significant PMHx and takes no regular medicines.

She is normally fit and well, doesn't smoke and denies regular alcohol or any illicit substances

On examination

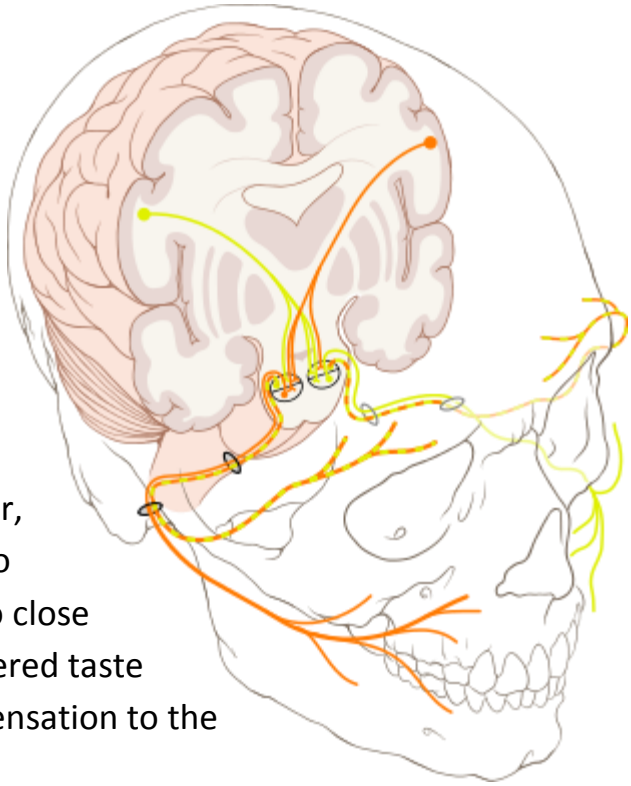
RR 16
SpO2 100%
HR 75
BP 110/70
Temp 36.7

Chest is clear
HS I + II + 0

Apart from her facial droop her neuro examination is unremarkable

1. What is the likely diagnosis?
2. How can this be differentiated from a stroke?
3. What is the management and what is the prognosis for recovery?

1) Bell's palsy



Bell's palsy is a mononeuritis affecting the facial nerve.

Its exact cause is unknown but it is thought to be due to inflammation of the nerve, causing pressure as it exits the internal auditory meatus. There is some evidence implicating herpes simplex virus 1.

The most notable symptom is facial droop, however, patients may also report other symptoms related to facial nerve function. These may include inability to close their eye, reduced salivation and lacrimation or altered taste (chordae tympani branch of CN VII supplies taste sensation to the anterior 2/3 of the tongue).

Other symptoms not attributable to facial nerve function such as facial tingling, headache and balance issues.

2) How can this be differentiated from a stroke?

Bell's palsy affects the lower motor neurone (LMN), so the entire ipsilateral face will be weak or paralysed equally. This is because LMN supply is entirely unilateral. In an upper motor neurone lesion, such as a stroke forehead function will be partially preserved as this area receives bilateral UMN innervation.

3) What is the management and what is the prognosis for recovery?

If the patient presents within three days of onset, they should receive a course of corticosteroids, these have been shown to improve recovery at six months.

Although antivirals are sometimes prescribed, due to the possible link with HSV 1, there is no solid evidence base for this.

Symptoms usually begin to regain function in less than three weeks. Around 70% of patients will eventually regain full function, but this can take up to one year or more

Patients who regain some function within two weeks almost always regain full function.