ED QUICK QUIZ
WHAT IS THE DIAGNOSIS?

BACKGROUND

70 year old man, who has recently been widowed, having taken a large quantity of his wife's old "panic tablets"

He told the ambulance crew he is only uses an inhaler.

While the crew were seeing him he said he felt unwell and became progressively drowsier on route to the hospital.

In ED he is just able to speak to you and complains of feeling very short of breath.

Examination reveals:

A= Protected, no immediate concerns

B= Chest sounds wheezy with crackles at both bases. SpO2= 95% RR 12

C= HR 45 (Regular), BP 90/40

ECG shows PR interval of 220ms with a QRS of 110ms and a QTc of 365ms

D= GCS E3V4M6

QUESTIONS

What is the likely toxin?

How would you manage him?

ANSWERS & DISCUSSION

1. Propranolol

Propranolol has two effects, B Blockade (non- selective) and sodium channel blockade.

Non- selectively antagonising his B receptors sets off his asthma and causes the hypotension and bradycardia (with signs of decompensation).

Sodium channel blockade prolongs the cardiac action potential leading to the ECG changes and is also the mechanism leading to neurological symptoms (seizures and coma).

2. He is beginning to decompensate, he needs to be in resus if not already.

ABCDE!!!

A= Currently protecting his airway, consider early intubation for predicted clinical course

B= High flow O2, Nebulised salbutamol and IV Steroids

SpO2 monitoring

ABG

C= Large bore IV access

IV fluid bolus

Sodium bicarbonate for ECG changes (like TCA OD)

Recheck ECG and blood gas after giving sodium bicarbonate.

Arterial line for close BP monitoring (also needs central line)

Could use atropine for extreme bradycardia (temporising measure)

In this case he needs an **inotrope infusion**

Consider glucagon infusion

Catheterise and monitor urine output

D= Benzodiazepines for seizures

Investigations: FBC, U&Es and Glucose, CK if the patient has been unconscious. Paracetamol and salicylates- it could have been a mixed OD. Chest x- ray.

When stabilised he needs to go to ICU. Propranolol can take up to 4 hours to reach peak plasma concentration and the half- life is up to six hours (when taken in therapeutic doses), so he could get worse before he gets better.