



# Training Series

## STROKE

Levels: First Aider; EMT; Paramedic; Nurse

Stroke can occur at any time and it is of vital importance that you act quickly, follow your training, follow DRSABCD and ensure once your assessment is complete and you confirm that your Patient may be having a stroke that you call 000 quickly.

There are three components of the assessment made up of:

1. **F**acial droop
2. **A**rm drift
3. **S**lurred speech
4. **T**ime

**Facial droop.** Ask the patient to smile. We're looking for asymmetry in the face. Is the face drooping? If it is on one side, well that's facial droop.

**Arm drift.** Have the patient extend their arms palm up and close their eyes. We're going to watch them for 10 seconds. We're looking to see if one of those arms starts to drift away. It'd be positive for arm drift.

**Slurred speech.** Ask the patient to repeat a sentence like 'you can't teach an old dog new tricks.' Are they able to say that without slurring their speech?

If they present with any one of these deficits, chances of having a stroke are 72%. If they present with all three of these deficits, about 87%. It's fast. It's reliable. It can be done in about 60 seconds.

First, get your assessment done. Alert 000 that you have a possible stroke. Second, follow your ABCs. Provide oxygen if they're hypoxic (Advanced responders). Check a blood glucose (if trained in this).

Another critical factor is to enquire on their last known normal. When was the last time anybody saw this patient without neuro deficits, they were acting normally, everything was fine? When was the last time that they were presenting normal? We need that time. Sometimes you don't need the assessment, the patient presents as if they're having a stroke. A Paramedic showed up and saw the patient. He could see the facial droop. He could see that she was paralyzed on one side. She had slurred speech. He skipped the exam. He knows what's going on. His scene time was minutes. Prehospital, it's really important to know what we can do. It's more important to know what we can't do, and **we can't fix this**. Definitive care for this patient is in the hospital. His scene time was minutes. Load her up and let's get going. Then he did all the supportive care on the way. He got the blood sugar, got the IV, notified the hospital. He did everything he was supposed to do, but he did it on the way to the hospital and reduced that time to get that CT so the Hospital could treat this patient.

## Best Medic Group Student Training Series

Looking at strokes, we can break them into two categories: ischemic and hemorrhagic. In an ischemic stroke, a clot has formed. Just like in a heart attack, a vessel in the brain has developed some plaque, the plaque ruptured, formed a clot, and occluded blood flow and oxygenation of that part of the brain. Or a clot formed somewhere downstream, floated to the brain, got wedged in a vessel, occluded blood flow and that caused a stroke. Those are ischemic strokes. They account for about 87% of all strokes. The other category is haemorrhagic stroke. In this case, a blood vessel has ruptured in the brain and it's bleeding. That's why it's so important to get that CT scan as quickly as we can to rule out a haemorrhagic event. It's so important to get information in the field and relay it to the people on the ambulance.

This is all very time critical for you and the hospital.