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MedFit Education Foundation
Committed to the Health of Our Nation

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Stroke Recovery Fitness Specialist



Module 1

General Information Regarding Stroke and Stroke Recovery

Lessons:

1. Understand stroke and it's causes
2. Common Issues Associated w/ Stroke
 - Specific Physical Issues Associated w/ Stroke
3. Cautions/Concerns Associated w/ Stroke Recovery
4. Neuroplasticity: What it is and Why it Matters
5. Basic Brain Anatomy and Function

Module 1

General Information Regarding Stroke and Stroke Recovery

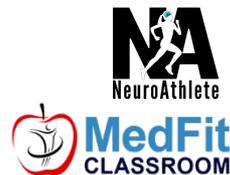
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Definition

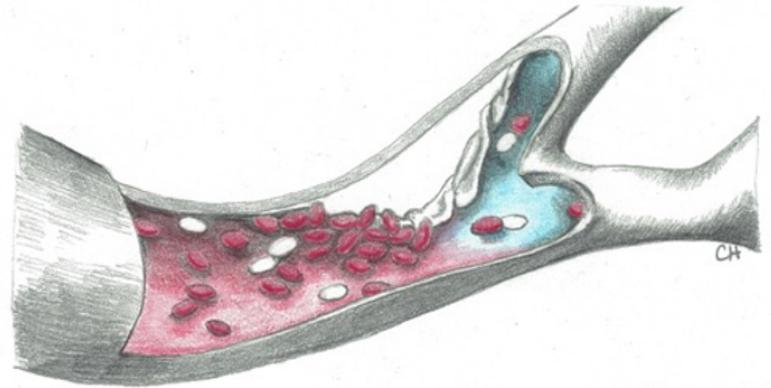
A stroke occurs when the blood supply to part of your brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes.

A stroke is a medical emergency, and prompt treatment is crucial. Early action can reduce brain damage and other complications.



Types of Stroke

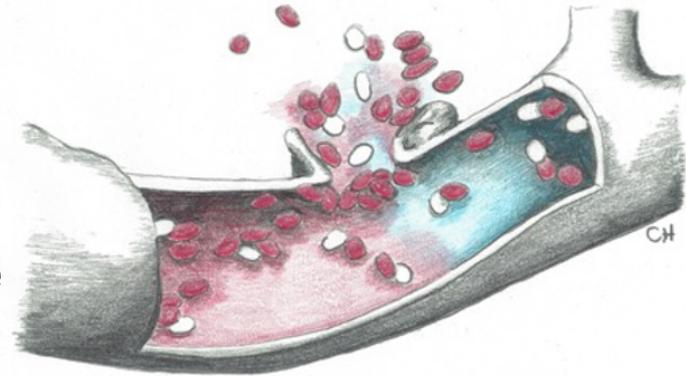
- Ischemic –
 - Blood vessels to the brain become narrowed or blocked
 - Severely restricted blood flow
 - Most common (87% of all strokes)
 - Caused by blood clots or fatty deposits built up in blood vessels



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Types of Stroke

- Hemorrhagic –
 - An artery in the brain leaks blood or ruptures
 - Leaked blood puts too much pressure on brain cells and causes damage
 - Factors include:
 - Uncontrolled high blood pressure
 - Aneurism (bulges in arteries that stretch and burst)
 - Overtreatment with blood thinners
 - Head trauma
 - An ischemic stroke leading to a hemorrhage



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Types of Stroke

- Transient Ischemic Attack (TIA) –
 - Sometimes referred to as a “mini-stroke”
 - A temporary decrease in blood supply to the brain, usually for less than 5 minutes
 - Symptoms are the generally the same as a major stroke, just temporary
 - Because initially there is no way to distinguish between a TIA and a major stroke, it is considered a medical emergency and requires emergency care
 - A TIA is caused by a blood clot or some kind of blockage of blood supply to the brain
 - Experiencing a TIA is a warning sign of a future major stroke

Stroke Signs

- Signs –
 - Sudden numbness or weakness in the face, arm, or leg, especially on one side of the body
 - Sudden confusion, trouble speaking, or difficulty understanding speech
 - Sudden trouble seeing in one or both eyes
 - Sudden trouble walking, dizziness, loss of balance, or lack of coordination
 - Sudden severe headache with no known cause
- Use the acronym F.A.S.T

F

Facial drooping on one side of the face is a very common stroke symptom. This occurs due to damage and ischemia of nerve tissue that occurs during stroke which interrupts signals to facial nerves. Asking the victim to smile and raise eyebrows will help identify this dysfunction.

A

Arm weakness occurs due to a stroke due to damage to motor nerves and areas of the brain. The arm affected is opposite the side of the brain where stroke damage is occurring. Ask the victim to grasp an object or shake your hand to see the dysfunction.

S

Speech problems such as slurred/confused speech, or inability to talk occurs frequently as areas to create and process speech are interrupted and damaged. Ask victim to repeat themselves and ask specific questions listening to their ability to speak to observe.

T

If the victim is showing any of these symptoms, immediately call 911. Make sure to be very explicit about your location and what you are observing so EMS, with stroke sparing drugs, can be dispatched to the scene and transport to the appropriate facility can be arranged.

Source: <https://nhcps.com/lesson/acls-acute-stroke-care/>

Stroke Facts

- Over 795,000 people experience a stroke every year in the US
- 610,000 are first-time strokes
- Only 66% are over 65
- Someone in the US has a stroke every 40 seconds
- The leading cause of long-term disability
- Black people are two times more likely to have a stroke
- 1 in 3 who suffer a stroke have preexisting risk factors such as high blood pressure, high cholesterol, diabetes, or overweight/obesity
- 55,000 more women die each year from stroke vs. men