

Pre-Hospital Care of Stroke Patients

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TOWER HEALTH

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Pre-Hospital Care of Stroke Patients

- No disclosures

Pre-Hospital Care of Stroke Patients

Bio-

Involved in EMS/healthcare for nearly two decades, working on ambulances across central PA prior to coming to Reading in 2012 to work in the ED as a Medic. Transitioned to EMS Outreach role in Fall 2019

Objectives

- Define the 911 system and how emergency response occurs
- Describe levels of EMS care in PA
- Outline EMS protocols for treating stroke patients
- Highlight System resource TowerDIRECT and their Critical Care Nurse Transport team

Quick, somebody call 911

- What happens when you call 911
- Simultaneous call taking/dispatching
- Emergency Medical Dispatch



EMS Providers

- BLS (Basic Life Support- EMT)
 - Advanced EMT (BLS-EMT + additional training)
 - ALS (Paramedic or Pre-Hospital RN)
 - Critical Care Nurse (Pre-Hospital RN w/ additional experience)
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- All are required to have yearly continuing education
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- *Reading School of Health Sciences offers EMS training programs

EMS Stroke Protocols

- Protocols dictate care and transport to closest appropriate facility
- Levels of Stroke Center
- Cincinnati Stroke Scale and mRACE for LVO

Is acute stroke suspected by Cincinnati Prehospital Stroke Scale ^{5,6} (CPSS)?

Face - facial droop present,

OR

Arm - upper extremity arm drift present (arms extended/ palms up),

OR

Speech - inability to say, "The sky is blue in Pennsylvania" normally,

AND

Time - time since last known well < 24 hours ⁷

Large vessel occlusion (LVO) suspected by ≥ 2 CPSS exam findings or mRACE Score (optional) ≥ 5

LVO strokes may benefit from care at Comprehensive or Thrombectomy-Capable Stroke Center

Other signs of possible stroke include poor balance, vertigo, and partial loss of peripheral vision



EMS Stroke Protocols

- Obtain Glucose
- Last Known Normal
- Next of Kin/Decision Maker contact info
- Call hospital as soon as possible to alert team

Case review

- EMS dispatched to a residence -neighbor possibly heard a patient fall out on the deck and then only groaning
- Arrived to find a multi-family dwelling with no door/window access to the unit where patient may be
- Patient on the deck 8 feet up with no steps to ground level

The Interfacility Transfer of a Stroke Patient

- Initiated via the Tower Health Transfer Center or your centers transfer center process
- Level of care needed
 - ALS versus Critical Care Transport(ground or air)

TowerDIRECT Critical Care Nurse Transport Team

- Specially trained nurses with 911 & hospital experience ranging from ED to ICU's that can treat patients on scene or between hospitals
- Stroke Specific-
 - TPA, Keppra, Cardene, Labetalol, Hydralazine & Pressers, hypertonic saline
 - ICP monitoring

TowerDIRECT Critical Care Nurse Transport Team



References

- <https://www.emergencydispatch.org/the-science/diagnostic-assessment-tools/39a95a68-6787-4f56-b1b8-385dd140ceec>
- <https://www.health.pa.gov/topics/Documents/EMS/2021%20PA%20BLS%20Protocols%20FINAL%209-1-21.pdf>
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Thank you!

Questions?



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