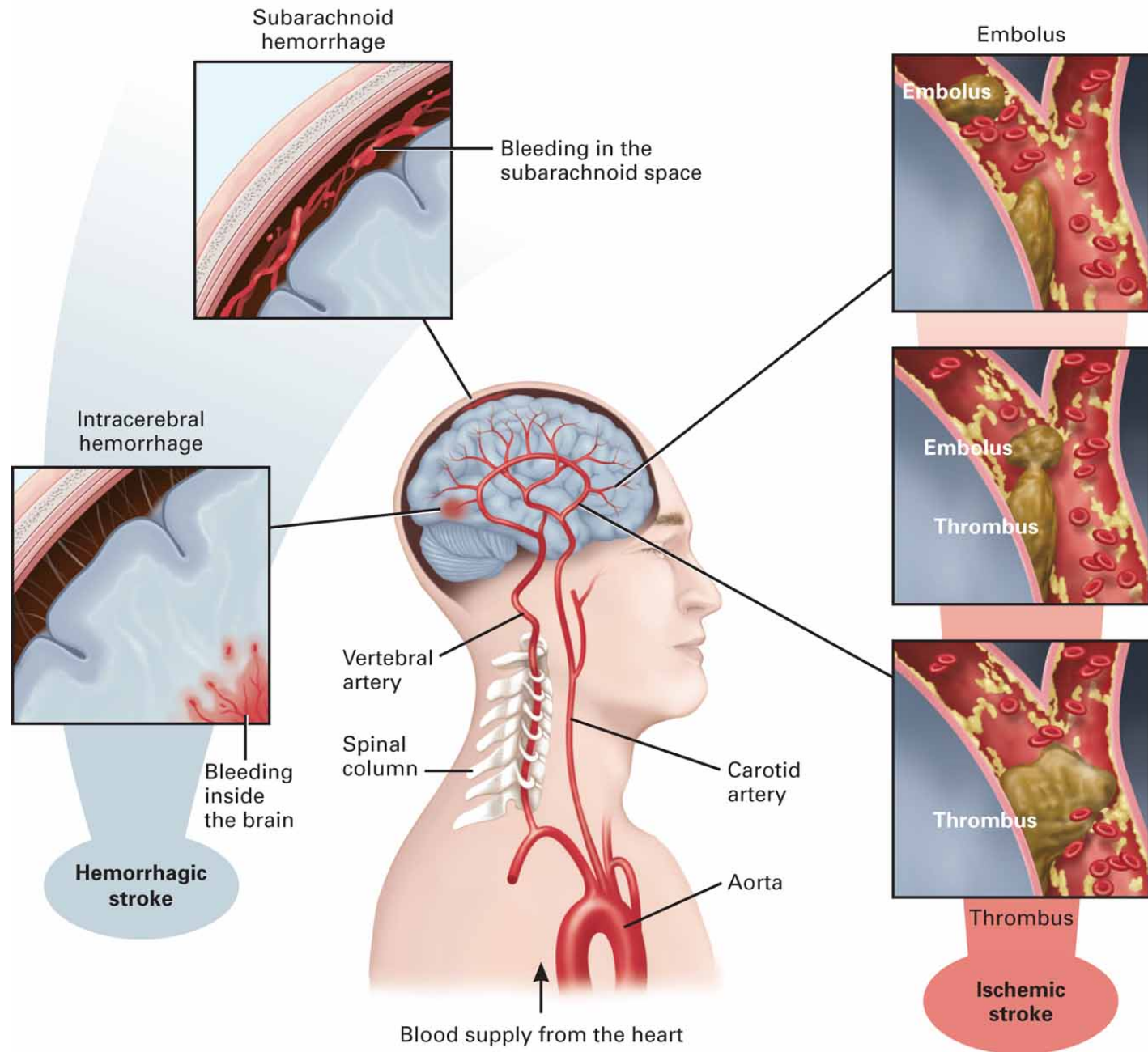




# Stroke

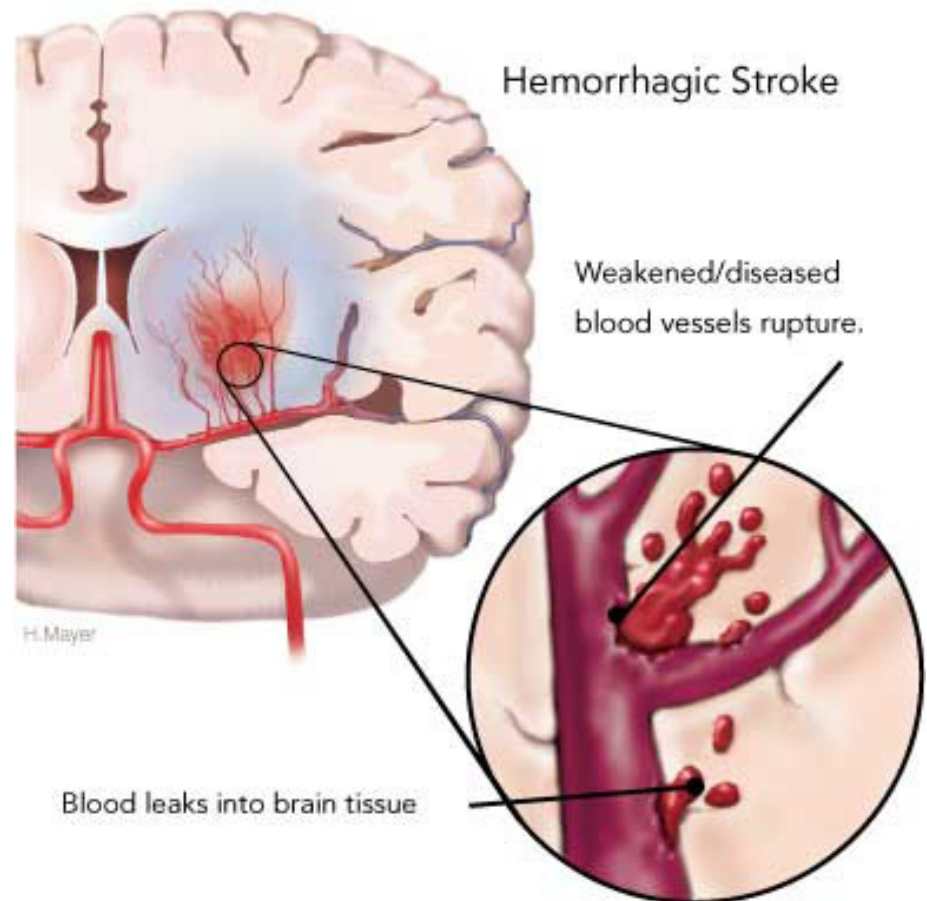
# Pathophysiology

- Ischemic Stroke
- Hemorrhagic Stroke



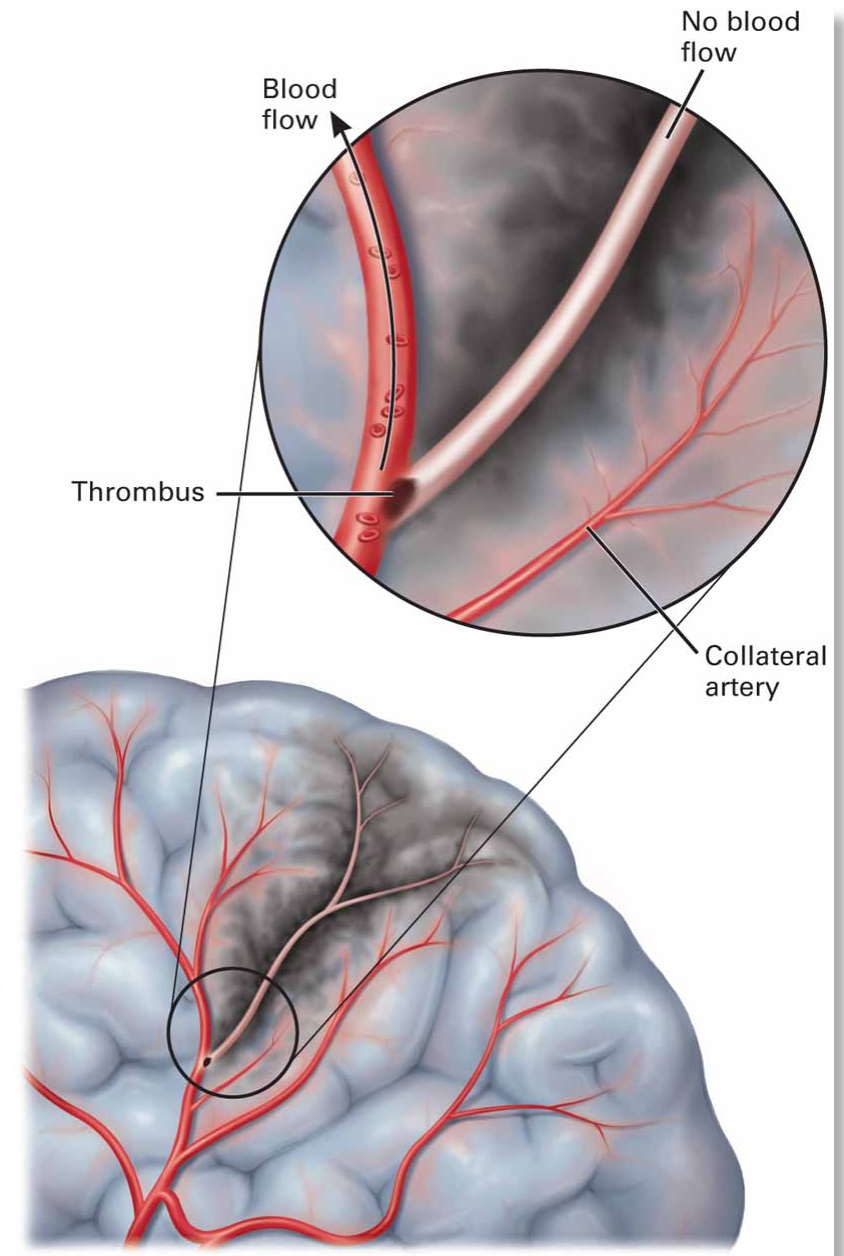
# Pathophysiology

- Blood vessel ruptures
- Bleeding into brain
- Tissue ischemia develops
- Infarct follows
- S/S of  $\uparrow$ ICP



# Pathophysiology

- Blood vessel becomes occluded
- Distal blood flow reduced
- Tissue becomes ischemic
- Infarction will follow





# Clinical Assessment

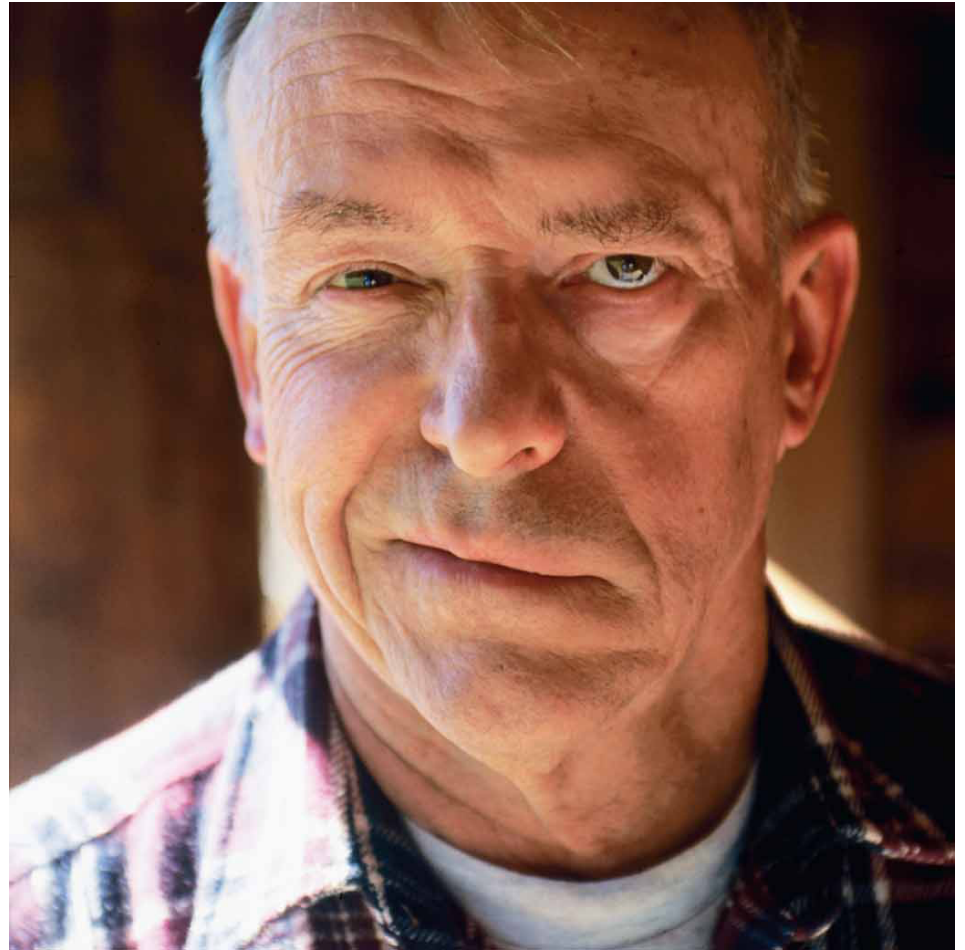
- Cincinnati Prehospital Stroke Scale

–Assesses:

- Symmetry of facial muscles
  - is facial droop present?
- Ability to articulate speech
  - is patient slurring their speech?
- Arm strength
  - is arm drift present?



# Facial Droop?





# Arm Drift?



# Slurred Speech?

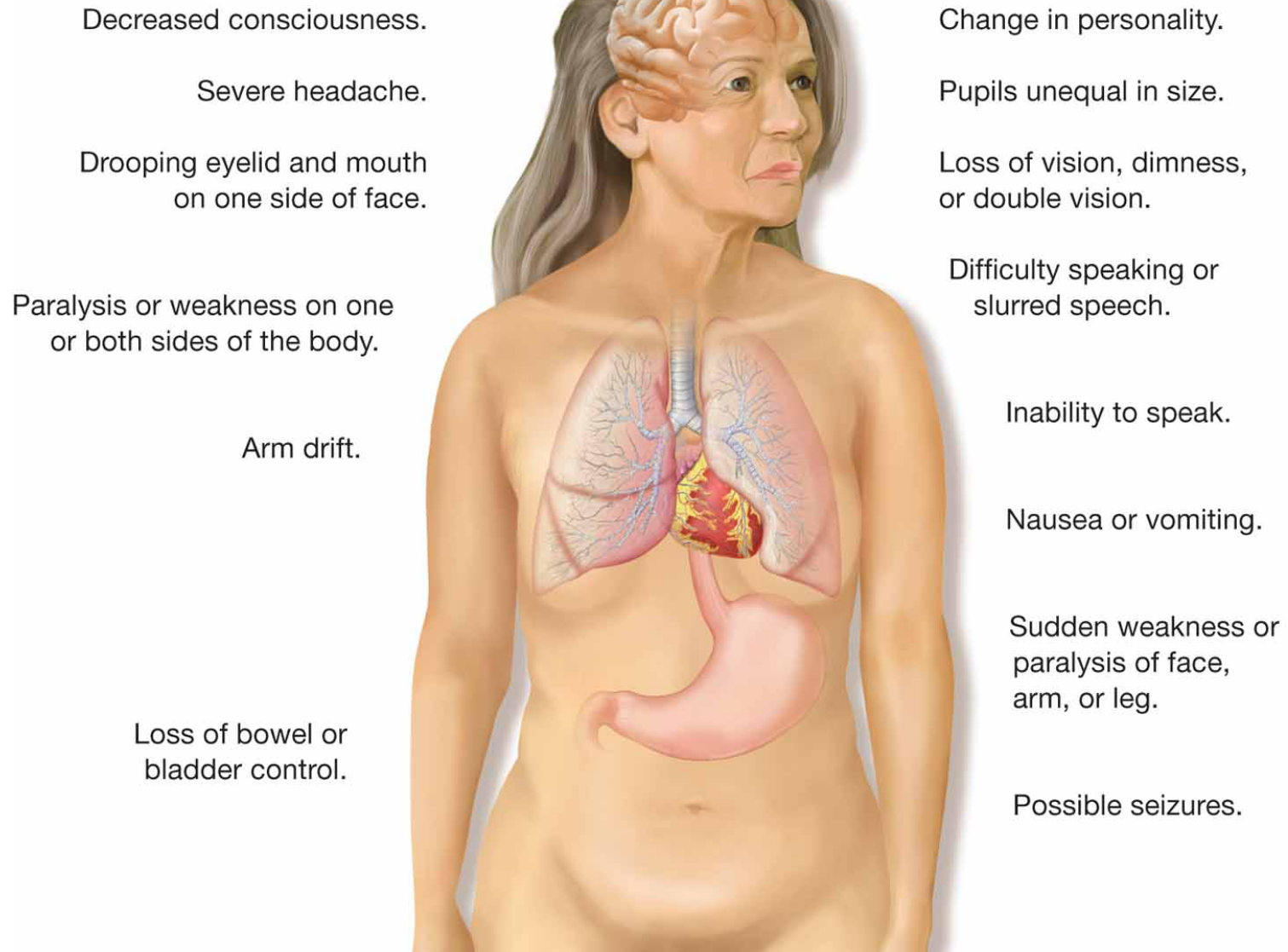
- “You can’t teach an old dog new tricks”
- Or whatever!





# Signs and Symptoms

## GENERAL SIGNS AND SYMPTOMS OF STROKE

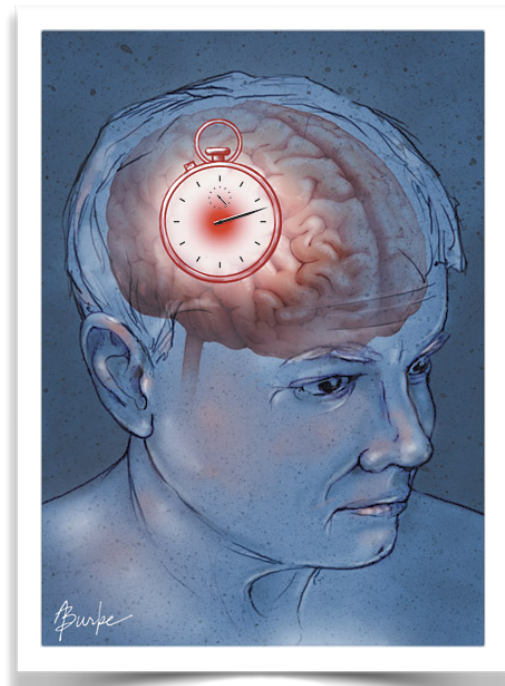




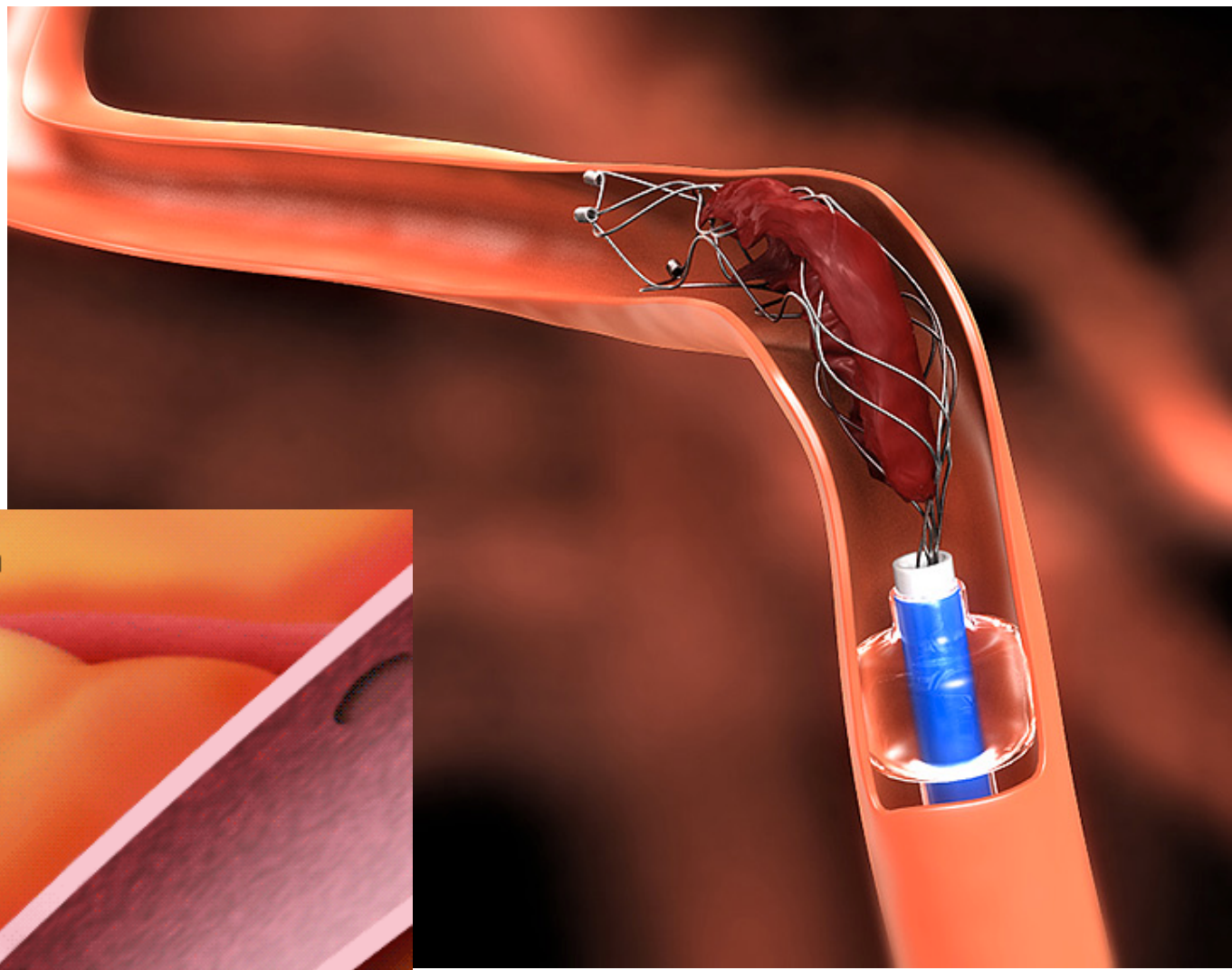
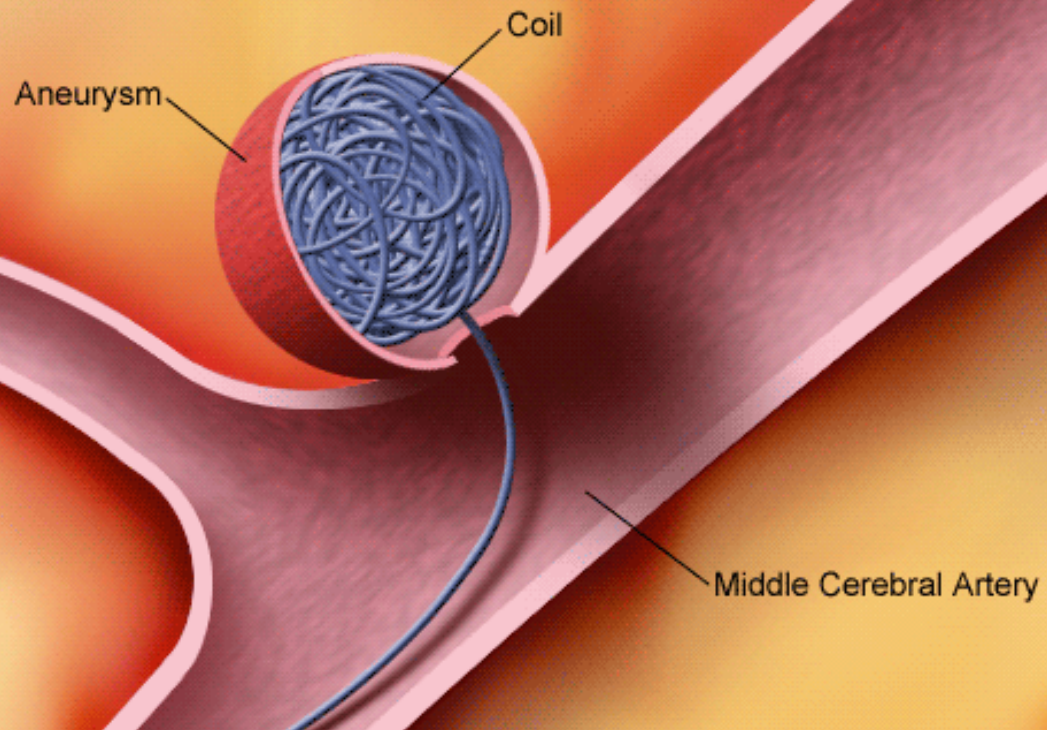
Time of onset very important!

When was the patient last seen normal?

Time is brain!



## Coil Procedure for Cerebral Aneurysm





# Treatment

- Airway
- Breathing
  - oxygen
- Proper positioning
- Check glucose level, if possible
- Protect paralyzed extremities
- Rapid transport to Stroke Center

# Quick Case 1

- 48 y/o M presents unconscious with snoring respirations. Wife states he c/o acute onset of headache, lost consciousness, and had a brief seizure. PMH = HTN controlled with metoprolol. VS: HR = 62 regular, BP = 184/132, RR = 6 shallow, SpO<sub>2</sub> = 88% on RA.

## Quick Case 2

- 62 y/o F presents CAO in NAD c/o weakness. Pt describes difficulty ambulating around home, almost falling numerous times. PE reveals R side weakness and slight facial droop. PMH = atrial fibrillation. Meds = diltiazem, warfarin. VS: HR = 72 irregular, BP = 132/88, RR = 18 good TV, SpO<sub>2</sub> = 97% RA.



# AEIOU-TIPS

- **A**lcohol, anoxia
- **E**ndocrine, **E**lectrolytes, **E**pilepsy
- **I**nsulin (diabetes)
- **O**verdose, oxygen
- **U**remia

# AEIOU-TIPS

- **T**oxidromes, **T**rauma, **T**emperature
- **I**nfection
- **P**syche
- **S**pace occupying lesion, **S**troke, **S**epsis