Acute Stroke Recognition & Treatment

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Stroke - Goals

- Be familiar with circulation distribution of brain
- Recognize difference in posterior stroke symptoms as compared to “classic” symptoms
- Discuss current treatment practices
- Understand the potential impact of pre-hospital assessment and education
Anterior Circulation

Internal Carotid (ICA)

- Ascends through base of skull to give rise to the anterior and middle cerebral arteries, and connect with the posterior half of circle of Willis via posterior communicating artery
Vertebral ascends from the subclavian arteries, through the transverse foramen of the cervical vertebrae to enter the cranial cavity via the foramen magnum. Gives branch to basilar which terminates into the posterior cerebral arteries.
Cerebral Anatomy

Primary Motor Cortex

Primary Sensory Cortex

Sensory Association Cortex

Visual Cortex

Visual Association Cortex

Broca’s Area
Stroke Symptoms

Right Hemisphere
- Left sided paralysis
- Spatial/perception problems.
  - Distance, size position
  - Judgment of own abilities
- Impulsive behavior
- Left sided neglect
- Left visual field cut

Left Hemisphere
- Right sided paralysis
- Speech / language problems
  - Expressive
  - Receptive
- Slow, cautious behavior
- Good judgment about ability / disability
- Right visual cut
Visual Field Deficits

Left eye visual field

Right eye visual field

(A)

Blindness in R eye

(B)

Bitemporal hemianopsia

(C)

L homonymous hemianopsia

(D)

Upper quadrant hemianopsia

(E)

Homonymous hemianopsia with macular sparing