

Identifying and Preventing Stroke

NeuroBridge

Pre-Workshop Trivia

How many signs of a stroke can you name?

Name 3 ways to prevent a stroke



What is a Stroke?

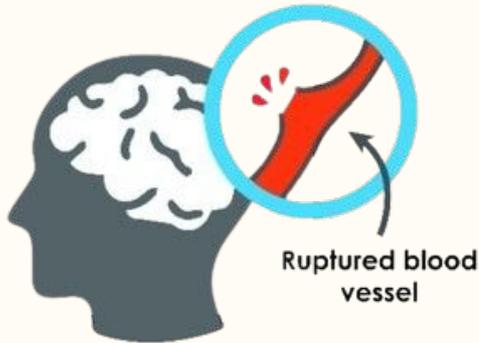
- Stroke happens when blood stops going to the brain
- Blood carries oxygen and nutrients that our cells need to survive



Types of Strokes

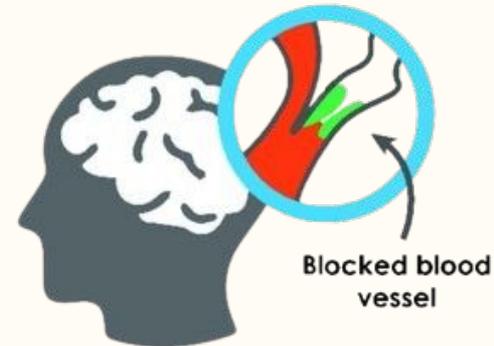
Hemorrhagic Stroke

Artery bursts and blood cannot reach the brain



Ischemic Stroke

Blood clot blocks blood from flowing to the brain



Hemorrhagic Stroke: Artery bursts and blood cannot reach the brain



Blood

Ischemic Stroke: Blood clot blocks blood from flowing to the brain



Transient Ischemic Attack (TIA)

- Blood clot that briefly blocks blood from getting to the brain
- Symptoms resolve <24 hours (usually within 1 hour)
- **Warning sign of a future stroke!**



WARNING!

Identifying a Stroke



Is it a stroke?

Act **F.A.S.T.**

- 

FACE
droops
- 

ARM
weakness
- 

SPEECH
difficulty
- 

TIME
is critical.

Identifying a Stroke



Brain Regions



FRONTAL LOBE

Thinking
Speaking
Memory
Movement

PARIETAL LOBE

Language
Touch

OCCIPITAL LOBE

Vision
Color perception

TEMPORAL LOBE

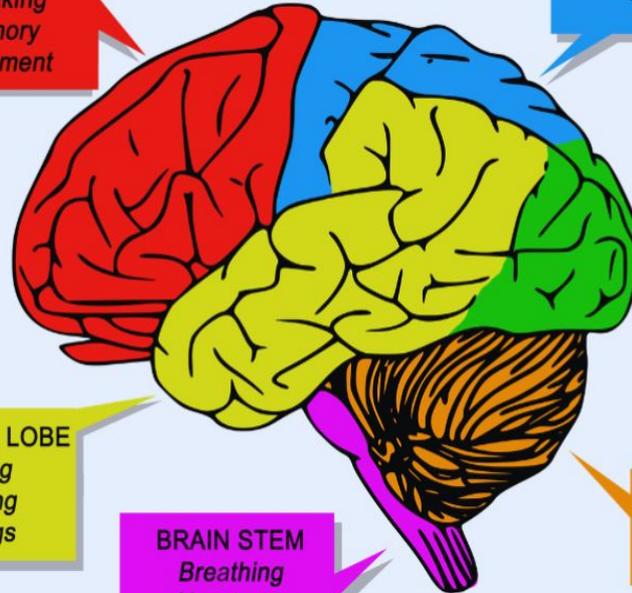
Hearing
Learning
Feelings

BRAIN STEM

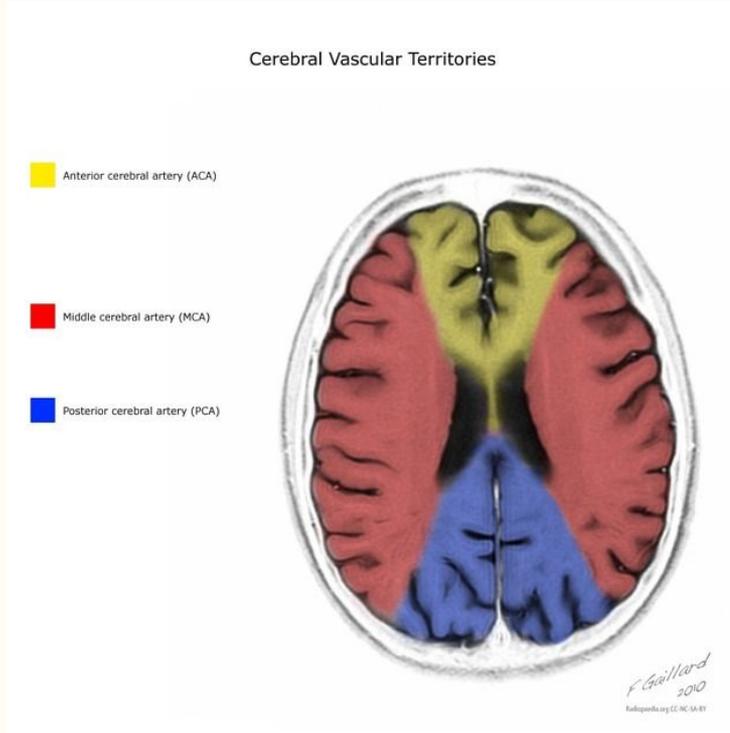
Breathing
Heart rate

CEREBELLUM

Balance
Coordination



Clinical Regions for Stroke



Anterior Cerebral Artery (ACA)

On the OPPOSITE side

Weakness of the Leg >> Arm

Middle Cerebral Artery (MCA)

On the OPPOSITE side

Weakness of the Arm >> Leg

Speech difficulty if on left side of brain

Posterior Cerebral Artery (PCA)

Complete loss of vision of the OPPOSITE side

SPOT A STROKE

LEARN THE WARNING SIGNS AND ACT FAST



B

E

F

A

S

T



BALANCE

LOSS OF BALANCE,
HEADACHE
OR DIZZINESS

EYES

BLURRED VISION

FACE

ONE SIDE OF THE
FACE IS DROOPING

ARMS

ARM OR LEG
WEAKNESS

SPEECH

SPEECH DIFFICULTY

TIME

TIME TO CALL
FOR AMBULANCE
IMMEDIATELY



CALL 911 IMMEDIATELY

Risk Factors for Stroke

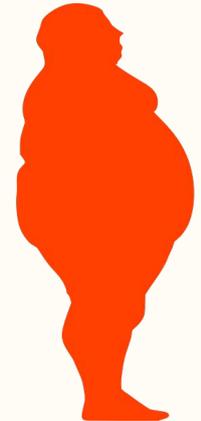
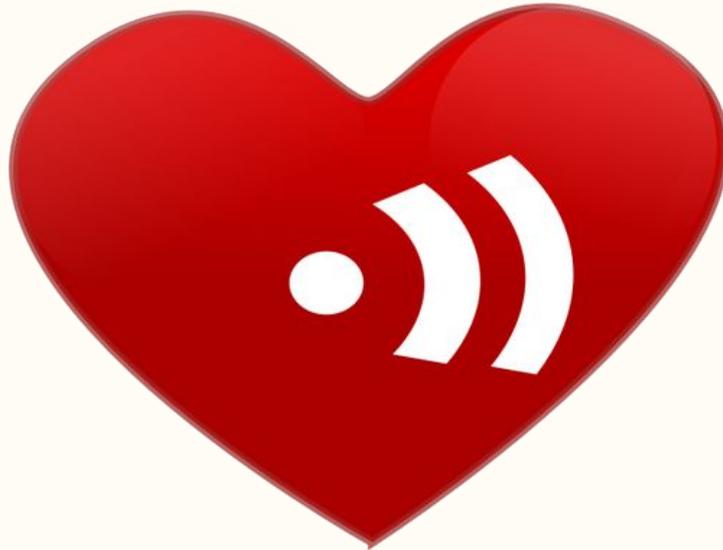
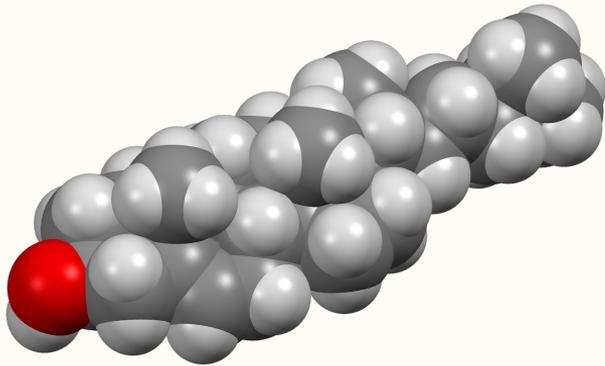


- **High Blood Pressure** – #1 cause of stroke, strains blood vessels.
- **Smoking** – Damages arteries, increases clot formation.
- **Diabetes** – High blood sugar weakens blood vessels.



Risk Factors for Stroke

- **High Cholesterol** – Leads to plaque buildup and blockages.
- **Heart Disease (Atrial Fibrillation)** – Irregular heartbeat increases clot risk.
- **Obesity** – Raises blood pressure, cholesterol, and diabetes risk.



Risk Factors for Stroke



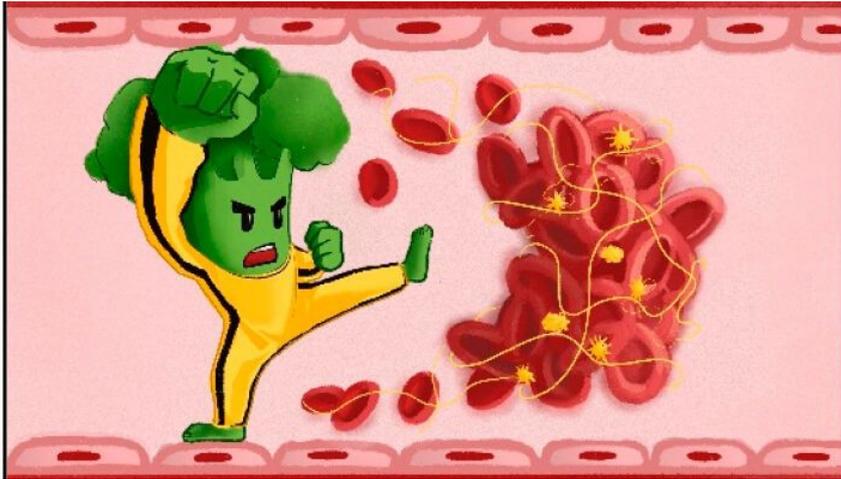
- **Lack of Exercise** – Weakens heart and circulation.
- **Unhealthy Diet** – Too much salt, fat, and processed food harm blood vessels.
- **Excess Alcohol** – Raises blood pressure and weakens heart function.
- **Family History & Age** – Risk increases with age, especially over 55.



Treatment of Stroke

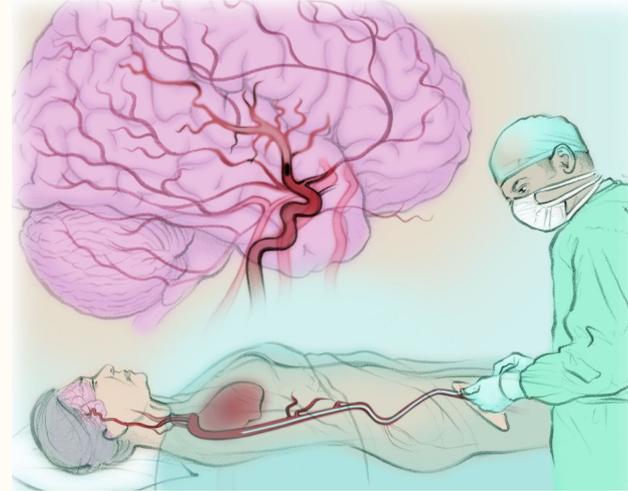
Ischemic Stroke:

Medication: tPA or blood-thinner



- Destroys the blockage and prevents new clots from forming

Procedure: Thrombectomy

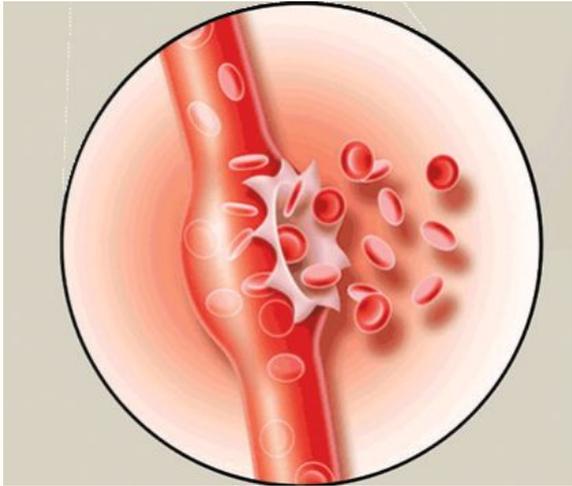


- Removing the clot using a catheter and stent retriever

Treatment of Stroke

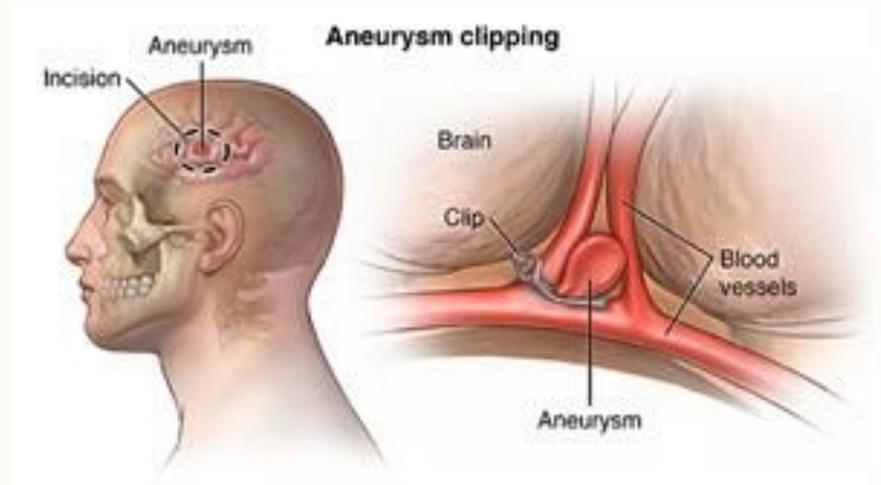
Hemorrhagic Stroke:

Medication: Lower BP, stop blood-thinners



- Reduce bleeding and strain on blood vessels

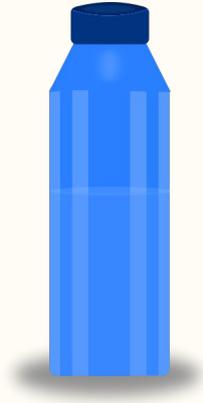
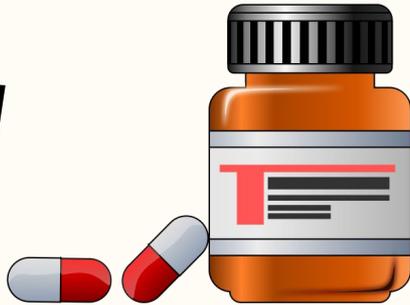
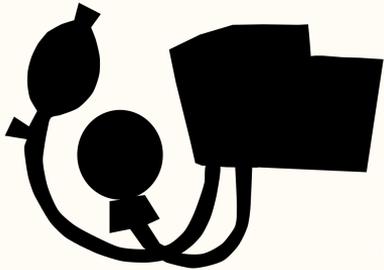
Procedure: Aneurysm Clipping



- Stops bleeding and reduces chance of repeat rupture

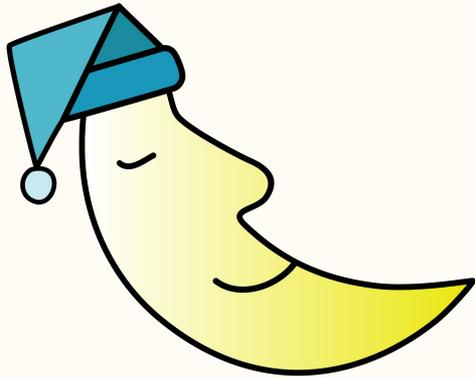
Prevention of Stroke

- ◆ **Check Blood Pressure** – Monitor regularly, follow treatment.
- ◆ **Take Prescribed Medications** – Manage BP, diabetes, cholesterol, and heart health.
- ◆ **Stay Active** – Walk, stretch, or do light exercises.
- ◆ **Eat Heart-Healthy Foods** – More fruits, veggies, whole grains; less salt.
- ◆ **Stay Hydrated** – Drink enough water daily (9-13 cups of water).



Prevention of Stroke

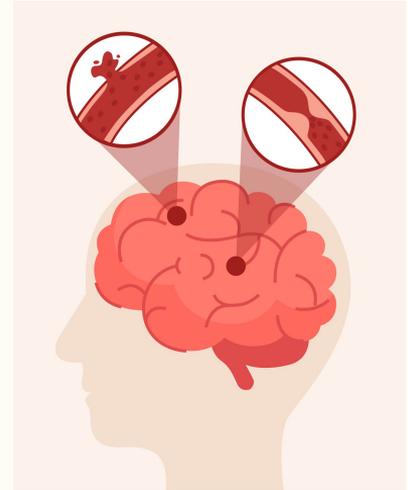
- ◆ **Get Quality Sleep** – Aim for 7-9 hours per night.
- ◆ **Manage Stress** – Try deep breathing, socializing, or relaxation techniques.
- ◆ **Attend Check-Ups** – Detect and manage risks early.
- ◆ **Limit Smoking & Alcohol** – Seek support if needed.



Key Takeaways

- ◆ Stroke is the **No. 5 cause of death** and a leading cause of disability in the U.S & Canada. Stroke can happen to anyone — any age, any time — and everyone needs to **know the warning signs**.
- ◆ On average, 1.9 million brain cells die every minute that a stroke goes untreated.
- ◆ Stroke is an emergency.
- ◆ **Call 911 immediately.**

Early treatment leads to higher survival rates and lower disability rates. Calling 911 lets first responders start treatment on someone experiencing stroke symptoms before arriving at the hospital.



Congratulations on Learning Life-Saving Knowledge!

Now you can BE FAST and educate others

Any questions?

Journey to Medicine



Courtney Ross, MS1

- Undergrad: Kenyon College (Gambier, OH)
- Major: Molecular Biology
- Played NCAA soccer
- High school: King's Christian Collegiate



Undergrad: Bachelor in Nursing (Honours)

Highschool: Old Scona Academic (In Alberta)

Post-Workshop Trivia

How many signs of a stroke can you name?

Name 3 ways to prevent a stroke

