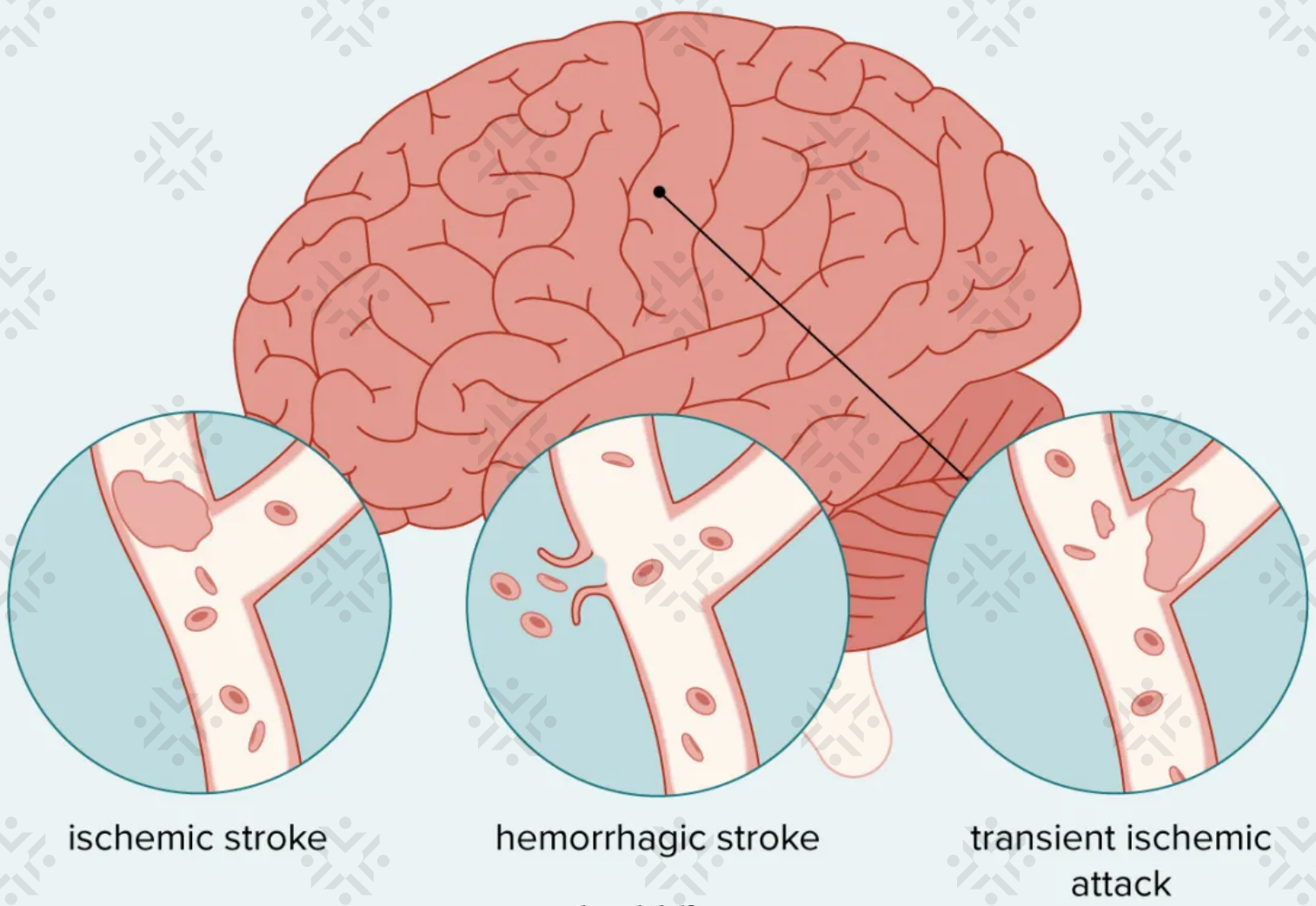


Stroke

Pathophysiology

- When there is inadequate blood flow to the brain (ischemia) or excessive bleeding that results in death of brain cells.
- Without proper blood flow, glucose and O₂ can't provide neurons what they need to function. Cell death occurs 5 minutes after blood flow is lost

Types of Strokes



Etiology

- Blood flow can be affected by many factors, the most common are changes in systemic blood pressure, cardiac output and blood viscosity

Risk Factors

Non Modifiable

- Age
- Gender
- Ethnicity
- Race
- Family
- History
- Heredity

Modifiable

- Hypertension*highest risk
- Heart disease*
- Diabetes*
- Smoking
- Obesity
- Sleep apnea
- Poor diet
- Metabolic syndrome
- Substance abuse

Nursing Interventions

- Find out time of symptom onset
- Monitor neuro status frequently
- Provide O₂ and monitor vitals
- Notify the HCP of a systolic BP>170 – possible hemorrhage
- Assist with communication and feeding as needed
- Have suction available
- Maintain skin integrity, especially in affected limbs

Signs and Symptoms

Right Brain Damage

- Left-sided neglect or hemiplegia
- Spatial deficits
- Minimizes problems
- Short attention span
- Impulsive
- Poor safety awareness
- Impaired sense of time

Left Brain Damage

- Right-sided neglect or hemiplegia
- Impaired speech or language
- Slow movements
- Aware of deficits
- Depression
- Impaired math
- Language skills

Diagnosis

- MRI and CT scan helps decide the course or treatments because it can distinguish between a thrombotic or hemorrhagic stroke
- CT angiography (CTA) shows the blood vessels and can show lack of blood flow to a certain area

Treatment and Prevention

- Prevention
 - Decrease salt
 - Exercise
 - Avoid smoking
 - Limit alcohol
 - Manage HTN
- Acute Care
 - Ischemic stroke
 - tPA
 - airway
 - fluids
 - endovascular therapy
 - Hemorrhagic stroke
 - Surgical decompression
 - Clipping or coiling
- Drug therapy
 - Platelet inhibitors
 - Anticoagulation
- Rehab Care
 - OT/PT/Speech to regain functions
 - Bladder training

Complications

- Unilateral neglect
- Dysphagia or Aspiration
- Neurologic deficits
- Depression