<u>Unit VIII – Problem 4 – Clinical Approach to Stroke</u>

<u>Definition of stroke</u>: a sudden interruption of cerebral blood flow leading to neurologic deficit.

Epidemiology of stroke:

- It is the 3rd leading cause of death in United States.
- It is a leading cause of adult disability.
- It is the most preventable among catastrophic conditions.

Signs and symptoms of stroke:

- Sudden severe headache and weakness.
- Paralysis or numbness of the face, arm or legs (especially on one side of the body).
- Confusion.
- Loss of consciousness.
- Difficulty of speech or understanding speech.
- Trouble seeing in one or both eyes.

What is the difference between stroke and transient ischemic attack (TIA)?

TIA: it has the same signs and symptoms as stroke but they last less than 1-2 hours (although they might extend sometimes to 24 hours). TIA may occur only once in a person's lifetime (or more than once).

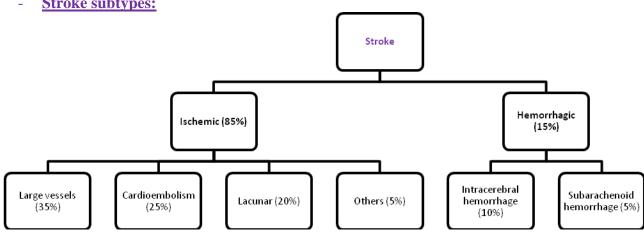
How to diagnose stroke?

- Brain CT or MRI
- CT and MRI arteriogram.
- Carotid ultrasound or carotid angiography.
- ECG or ECHO
- Blood tests.

Differential diagnosis of stroke:

- Chronic subdural hematoma.
- Brain tumor.
- Hypoglycemia.
- Metabolic encephalopathy.
- Postictal neurologic deficit.

Stroke subtypes:



Risk factors for stroke:

- Medical conditions: hypertension, diabetes, hyperlipidemia, cardiac disease and atrial fibrillation.
- Behavioral factors: smoking, alcohol and physical inactivity.

Management of stroke:

- Thrombolytics (↓ risk of atherosclerotic stroke): daily therapy with aspirin or clopidogrel.
- All patients with atherosclerosis regardless LDL baseline or blood pressure must receive statins and ACE inhibitors + thiazide diuretics (unless contraindicated).
- Behavioral management: exercise, diet education, smoking and alcohol cessation.

