

Babylon University – College Of Medicine
Department of Community Medicine

*Lectures in Community Medicine
For 4th Stage Students
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Lecture 34

Stroke

The term stroke is applied to acute sever manifestation of cerebrovascular disease.

Definition: rapidly developed clinical signs of focal disturbance of cerebral function.

Lasting more than 24 hours or leading to death, with no apparent cause other than vascular origin.

Clinical classifications:

- 1- Subarachnoid hemorrhage.
- 2- Cerebral hemorrhage.
- 3- Cerebral thrombosis.
- 4- occlusion of pre cerebral arteries.
- 5- Transient cerebral ischemia more than 24 hours.

Transient ischemic attack:

Episodes of focal, reversible, neurological deficit of sudden onset and of less than 24 hours duration, shows tendency for recurrence.

Extent of the problem:

- Cerebral thrombosis most common followed by cerebral hemorrhage.
- Nearly 75% of stroke patients had associated cardiovascular disease or diabetes. The incidence ranges from 0.2 – 2.5 / 1000 population.
- It is the leading cause of mortality, one third of stroke patients die within three weeks and 48% die within one year.
- Mortality shows declining trend in developed country.

Non-modifiable risk factors of stroke:

- Age: increases with age
- Gender: more in males.
- Race: more in African and Asian than in European people.
- Heredity: there is a positive family history which associated with this disease.

Modifiable risk factors of stroke:

- Hypertension
- Heart disease
- Diabetes
- Hyperlipidaemia
- Smoking
- Access alcohol
- Polycythaemia
- Oral contraceptives

Prevention of stroke:

- Primary Prevention:

Primary prevention by health education (population strategy is the most ideal) and

A- Elimination of smoking

B- Controlling other risk factors like diabetes

C- Low fat diet

D- Avoidance of alcohol consumption or reducing intake to the minimum amount < 75 gm per day.

- Secondary prevention:

1- Early detection of risk factors.

2- Treatment (which may be long term) with appropriate medications.

3- Long term follow up especially those with transient ischemic attacks (aspirin).

4- Appropriate neurological management.

- Tertiary prevention;
 - A- Disability limitation
 - 1- Treatment of complications.
 - 2- Good nursing care (bladder and bowel).
 - 3- In developed countries specialized stroke care unit exists.
 - B- rehabilitation: physical, occupational, psychological
- Half to three quarter surviving an acute stroke achieve functional independence mostly within the first three months.