



جامعة الإمام عبد الرحمن بن فيصل
IMAM ABDULRAHMAN BIN FAISAL UNIVERSITY

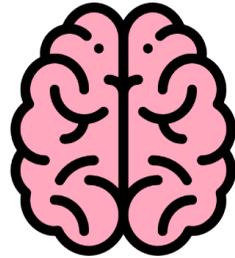
مستشفى الملك فهد الجامعي
King Fahad Hospital The University

What is a Stroke?



How does the brain work?

- **The brain:** is the organ responsible for coordinating and sending commands of movement, thinking and speech.

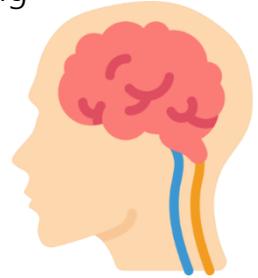


- **Neurons:** The brain is full of nerve cells link with each other in a coordinated way to issue commands to the body's organs. To function well, it needs blood supply through blood vessels (arteries and veins).

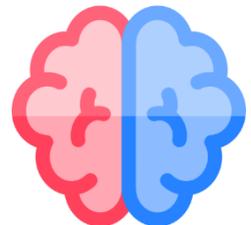


How does the brain work?

- **Brain blood vessels:** arteries and veins carry blood to and from the body's organs, including the brain. Normal brain cells are very delicate and need continuous perfusion to keep functioning.

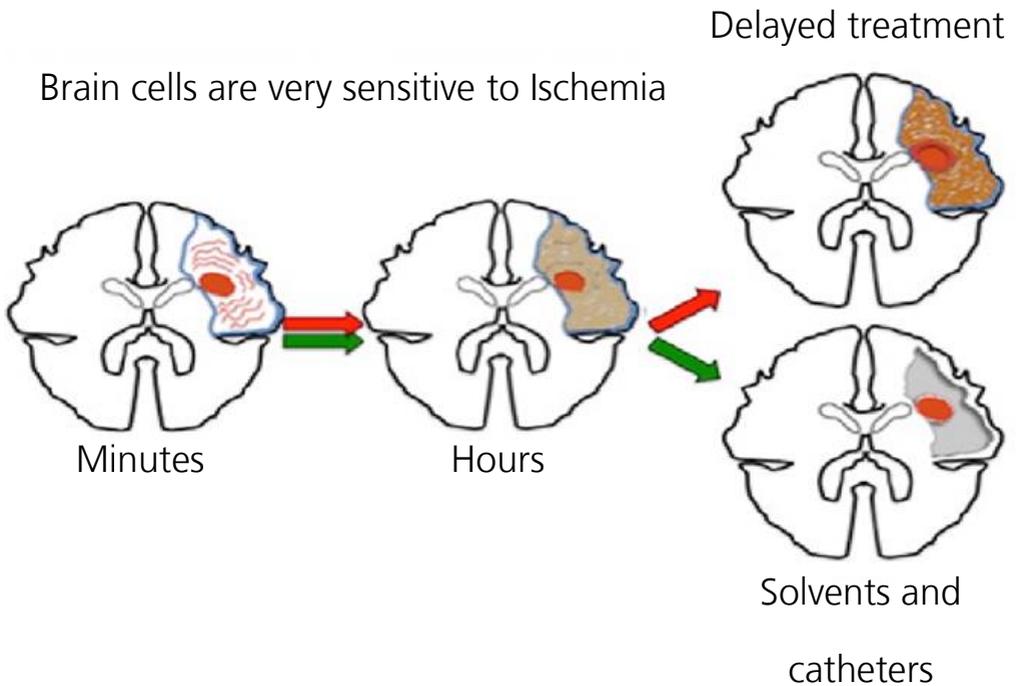


- **Lobes of the brain:** the human brain is divided into two lobes: the left lobe is responsible for speech and the right part of the body while the right lobe is responsible for perception and the left part of the body. Some functions are coordinated by both lobes.



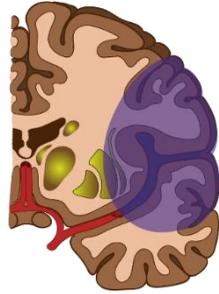
What happens when a stroke occurs?

A **stroke** occurs in case of perfusion lack to any part of the brain. This defect damages nerve cells and making them loss function.



What are the types of stroke?

❖ **Ischemic stroke:** It is due to lack of blood flow because of a blockage or narrowing of the cerebral artery, which is responsible for delivering oxygen and nutrients to brain cells.

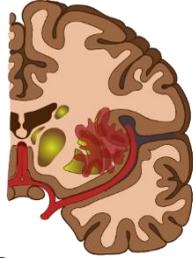


A blockage of an artery is either a result of:

- A substance deposited in an artery wall that causes a thrombosis (blockage of a blood vessel by a locally formed blood clot)
- Or embolism (blockage due to embolism from elsewhere in the body, such as the heart)
- Or a lack of systemic blood flow.

What are the types of stroke?

❖ **Hemorrhagic stroke:** It is caused by a cerebral hemorrhage. This occurs when an artery bursts, causing bleeding in the brain cells, which causes part of the brain to not function properly.



High pressure and aging are the most important factors that help in weakening the arteries and their susceptibility to rupture and cerebral hemorrhage.



Symptoms often appear shortly after a stroke. If symptoms persist for less than an hour or two, the condition is defined as a transient ischemic attack.



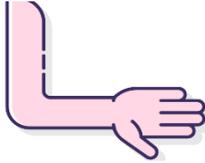
What are the types of strokes?

Uncommon types of stroke: in rare cases, tumors, arteritis, or genetic disorders cause strokes.

What are the symptoms of a stroke?



Do not late



weake side in
the body



facial deviation



Dysarthria

Other symptoms:

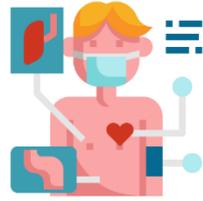
- Numbness on one side of the body.
- Double vision.
- Lack of vision in a certain side or one of the eyes.
- A sudden disturbance of balance or a new, very severe headache (such as lightning).

When any of these symptoms appear, call 911

directly and don't be late, as every minute equals two million neurons and days of disability.



How do these clots affect my body?



The effect of stroke varies from person to person. The effect may be slight, moderate, or severe, leading to disability, and this certainly depends on several factors:

Type of stroke (ischemic or hematologic).

Affected cerebral lobe (right or left).

- The time the brain spends in a state of ischemia.
- How long it takes to go to the nearest hospital where the necessary treatment is available.
- Whether the clot is minor or severe, go to the nearest hospital, even if the symptoms disappear.

Deficiency

about Transient
perfusion

Mild stroke

Medium stroke

Severe
stroke



Non-permanent
damage

Minor
Damage

Sever and
permanent damage



Is there a cure for stroke?

- Clot-dissolving medication within 4-5 hours from the onset of stroke symptoms.



- Catheterization and clot withdrawal in some severe cases up to 24 hours after the onset of symptoms



- In addition to the tests and other treatments to reach the cause of stroke for preventing its recurrence,



and rehabilitation by specialists which may extend to several months for reducing the disability to the least.

What are the risk factors of strokes?

- **High blood pressure:** High blood pressure is a major cause of both types of strokes.



Lower your blood pressure to less than

130/80 by reducing the amount of salt in food,

exercising, and taking medications. Be sure to visit

your doctor periodically to check its level.

- **Smoking:** all types of smoking (cigarettes, hookahs, e-cigarettes, and other types)



and prolonged exposure to secondhand smoke

increases the risk of strokes for non-smokers or

smokers gave it up for 10 years or more.

What are the risk factors of strokes?

- **Diabetes:** The high level of blood sugar is one of the most important causes of brain strokes and heart attacks.



Regulate your blood sugar by taking appropriate drugs under the supervision of your doctor.

- **High percentage of lipids (cholesterol):** It narrows the arteries, which increases the risk of strokes.



Commit to a healthy diet and exercise regularly, in addition to adhering to fat-reducing medications.

What are the risk factors of strokes?

- **Heart disease and ailments**, such as atrial fibrillation.



Adhere to treatment and regular follow-up with a cardiologist.

- **Obesity**: Obesity is associated with many risk factors that increase the chances of stroke, such as high blood pressure, hyperlipidemia, and diabetes.



- **Lack of movement**: It will contribute to increasing the chances of stroke. Lack of movement leads to the accumulation of other risk factors such as high blood pressure, diabetes, and other factors.



Factors can be controlled:

high blood
pressur



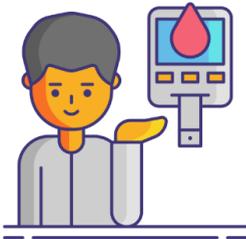
quit smoking



lacke of
movement



diabetes



cholesterol



obesity



Review and audit:

The content of this booklet has been reviewed by
consultants of the Neurology department at King Fahad
University Hospital

Health Awareness Unit

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