

How to cope with stroke

DR ALIM AKHTAR BHUIYAN

Stroke is a type of cerebrovascular disease. It affects the arteries leading to and within the brain. Stroke occurs when blood vessels that carry oxygen and nutrients to the brain are blocked somehow. As a result, part of the brain cannot get blood, oxygen and other nutrients that it needs. Consequently the part dies in course of time; and most often it happens very fast which is completely irreversible.

The brain is an extremely complex organ that controls various body functions. If stroke occurs and blood flow cannot reach the region that controls a particular body function, that part of the body will not work as it should.

The risk factors for stroke include hypertension, diabetes mellitus, increase of blood cholesterol level, certain heart diseases, smoking, obesity, sedentary lifestyle etc.

Types of stroke

There are two types of stroke —

1. Ischemic; and
2. Hemorrhagic

Ischemic strokes occur as a result of an obstruction within a blood vessel supplying blood to the brain. The underlying condition for this type of obstruction is the development of fatty deposits lining the

vessel walls. This condition is called atherosclerosis.

Hemorrhagic stroke results from a weakened vessel that ruptures and bleeds into the surrounding brain structure. The blood accumulates and compresses the surrounding brain tissue.

Transient ischemic attacks

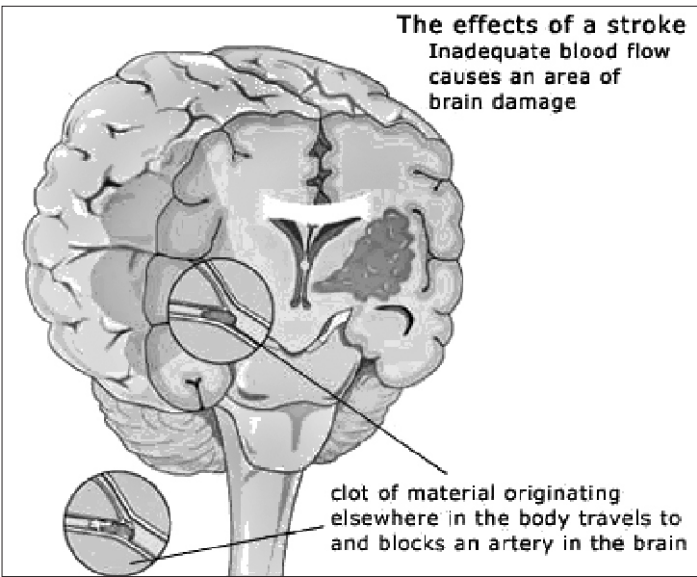
Transient ischemic attacks (TIA) are minor or warning strokes. In case of TIA, conditions indicative of an ischemic stroke are present and the typical stroke warning signs develop.

However, the obstruction (blood clot) occurs for a short time and tends to resolve itself through normal mechanisms.

Even though the symptoms disappear after a short time, TIAs are strong indicators of a possible major stroke. Steps should be taken immediately to prevent a stroke.

Symptoms of stroke

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden severe headache, vomiting, loss of consciousness



with no known cause

Diagnostic tests

Diagnostic tests examine how the brain looks, works and gets its blood supply. They can outline the injured brain area. Most of them are safe and painless.

CT scan (Computed Tomography) is a key imaging test. It is usually one of the first tests given to patients suspected of stroke. CT test results give valuable information about the cause of stroke and the location and extent of brain injury.

MRI (Magnetic Resonance Imaging) uses a large magnetic

field to produce an image of the brain. Like the CT scan, it shows the location and extent of brain injury. The image produced by MRI is sharper and more detailed than a CT scan so it is often used to diagnose small, deep injuries.

What is a blood flow test?

Several blood flow tests exist; most use ultrasound technology. A probe is placed over the suspect artery — especially arteries in the neck or at the base of the skull — and the amount of blood flow is determined.

Examples of blood flow tests are B-mode imaging, doppler

testing and duplex scanning. These tests give detailed information about the condition of arteries.

Another blood flow test is a medical procedure called angiography (arteriography or arteriogram). Special dyes are injected into the blood vessels and an X-ray is taken. Angiography gives a picture of the blood flow through the vessels. This allows the size and location of blockages to be evaluated.

Treatments

Antiplatelets/Anticoagulants

: Antiplatelet (aspirin like drugs) agents play an important role in preventing stroke.

Carotid endarterectomy

: Carotid endarterectomy is a procedure in which blood vessel blockage is surgically removed from the carotid artery.

Angioplasty/Stents

: Sometimes balloon angioplasty and stents are used in intervention procedure.

Surgical intervention

: For hemorrhagic stroke, surgical treatment is often recommended which includes surgical evacuation of a haematoma, placement of a metal clip at the base (neck) of the aneurysm or to remove the abnormal vessels comprising an Arteriovenous Malformation (AVM) by Endovascular Procedures, e.g., "coils".

Endovascular procedures are

less invasive and involve the use of a catheter introduced through a major artery in the leg or arm, guided to the aneurysm or AVM where it deposits a mechanical agent, such as a coil, to prevent rupture.

Common effects of stroke

Every stroke is individual, but there are a number of common ways in which stroke can affect someone. The disability from stroke depends on the size, extent and area of the brain affected. Stroke patients can have some disability such as motor, language dysfunction, swallowing problems, sensory deficit, visual disturbance, incoordination, behavioral disturbance etc.

Comprehensive rehabilitation which includes physical therapy, occupational therapy and speech therapy needs to be continued following stroke.

Maximum recovery following stroke occurs in the first 3-4 months which then gradually slows down. Regular follow up by the concerned consultant neurologist is very much essential so that the recovery is monitored and also the associated risk factors are controlled which prevents the chance of recurrence of stroke.

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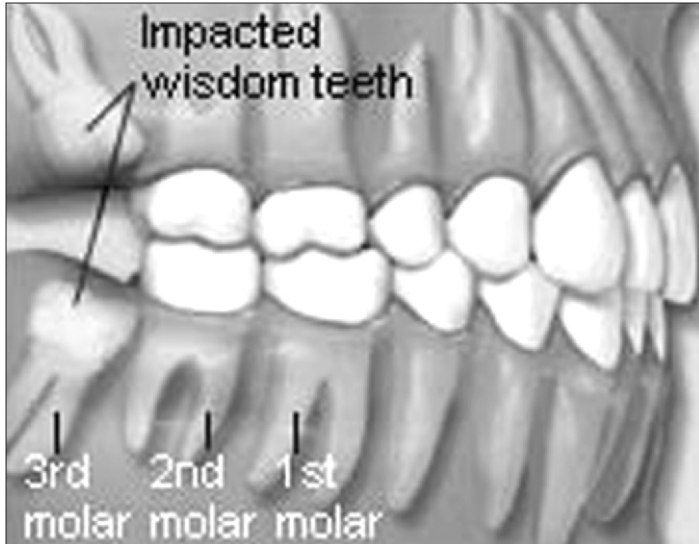
Impacted wisdom teeth and real sense of pain

DR K ABUL HASNAT

Most of the people suffer from severer pain during the eruption of wisdom teeth (third molar teeth). But if you consult with a dentist during that time, you may relief from any complication.

The variety of complications during eruption of wisdom teeth may be as follows:

- 1) Due to lack of space, the wisdom teeth may not erupt in proper time or may be erupt part of the teeth and rest part may remain under the mucosal fold. When food is taken, the food debris easily enter under this fold and due to bite pressure that cannot come out after well rinse or after tooth brushing.
- After few days, this debris become rotten and incorporate with the bacteria and form a periodontal pocket which leads to severe infection. This condition is very painful and known as pericoronitis. In this condition patients cannot take food and even can not open his/her mouth properly. This pain can spread throughout the head, neck and part of the affected side of the body. Here tender swelling, fever and foul smell are common.
- 2) If untreated for long time, due to eruption and bite pressure the second molar may be affected by proximal or root caries or may be sensitivity.
- 3) Wisdom teeth may be impacted completely inside the bone in various backward positions. In this situation, there may or may not be symptoms of infection or pain. Even most of them never know that he or she has



wisdom tooth. This condition should be evaluated by a radiograph.

3) In case of fully erupted wisdom teeth there is every possibility to form carious lesion. Because of its position, it is not visible clearly by necked eye, so food debris accumulate over and around that teeth. It is very tough to clean up by brushing or rinse. That is why after few days, bacteria contact with those teeth and form caries without any symptom.

Treatment options depend on the condition of the teeth. If part of teeth erupt and rest of the part is covered by mucosal fold, excess mucosal fold can be cut off by a small surgical procedure known as operculectomy if there is sufficient space. After that within very short period, the wisdom teeth erupt completely.

If mouth cavity is not sufficient or the wisdom teeth remain impacted in a very tough angle or eruption of wisdom teeth is hampered by second molar, then without wasting time the wisdom teeth should be surgically extracted as early as possible. At the same time if second molar has been already affected by caries that should also be treated with this procedure.

If radiograph shows impacted wisdom teeth without any complication, then the teeth should be placed in its own position.

As there is every chance to form caries and it is tough to clean up, people should routinely consult with a dentist for proper guideline.

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Back surgery: When is it a good idea?

DR TAREQ SALAHUDDIN

Oh, your aching back! Not simply an ache. This pain is serious. You wonder — could surgery end the discomfort once and for all?

Injury, aging, improper body mechanics and normal wear and tear can all injure your spine. And damage to any part of your back — especially pressure on your nerves — can cause pain and other symptoms.

Most back problems respond to non-surgical treatments, such as anti-inflammatory medication, ice, heat, gentle massage or physical therapy. When conservative treatments do not help, surgery may offer relief. But it does not help every type of back pain. In fact, back surgery is needed only a small percentage of the time.

Is surgery right for you?

Most people will have back pain sometime during their lives. And 90 percent of these people will get better, with or without treatment, within four weeks. Only 5 percent remain disabled longer than three months.

In most situations, an operation would not be considered unless conservative measures had failed, and even then it is not often indicated. Surgery is usually reserved for times when a nerve is pinched, the spinal cord is compressed or there is too much movement between the spinal bones (vertebrae).

Surgery may be recommended if you have neck or back pain accompanied by symptoms of nerve damage. Signs and symptoms include pain that radiates down the legs (sciatica) or arms, numbness, weakness or tingling in arms or legs, loss of bladder or bowel control.

Squeezed and pinched

Your vertebrae are separated by soft, flexible disks that have a tough outer shell and a soft, gooey center. They act as cushions between the vertebrae. Your spinal cord runs down through your vertebrae, and nerves pass through gaps in the spinal column.

Many types of problems can reduce the amount of space in the spine, so nerves become pinched. As people age, it is common for spinal disks to dry out and shrink, reducing their effectiveness as shock absorbers. Disks can also bulge or rupture (herniate), which can irritate nearby nerves. However, many people with bulging disks have no pain.

To relieve pressure on the spinal cord or nerves, surgeons can remove portions of bone to widen the narrowed area in the vertebrae. Removing the gel-like interior of ruptured disks also helps relieve pressure on pinched nerves. Sometimes the entire disk must be removed, with the adjoining vertebrae fused together surgically. One alternative to fusion may be a new procedure that replaces the damaged disk with an artificial one.

Fractures and deformities

Direct injury to the spine may cause a bone fracture anywhere along your vertebral column. Osteoporosis — loss of bone density — can weaken vertebrae, causing them to fracture or collapse.

In most cases, fractured vertebrae heal without any help. But if the spinal column is unstable, some doctors opt to fuse two or more vertebrae together — using bone grafts and metal plates, screws, rods or cages.

The conditions I like Scoliosis (a curvature of the spine), Kyphosis (a humpback deformity), Spondylolisthesis (the forward slippage of a segment of the spine) may require surgery if they are progressive, painful or causing nerve compression.

Consider all options

Before you agree to back surgery, consider getting a second opinion from a qualified spine specialist. Back and leg pain can be a complex issue that may require a team of health professionals to diagnose and treat.

To prevent recurrent back problems, use good body mechanics, keep your back muscles conditioned with regular exercise and stretching, and control your weight.

Did You Know

Stressed-out types at risk for memory problems

REUTERS, Chicago

People who are often stressed out or depressed are far more likely to develop memory problems than those with sunnier dispositions, U.S. researchers said in a finding that sheds light on early predictors of Alzheimer's disease.

They said those who most often are anxious or depressed were 40 times more likely to develop mild cognitive impairment, a form of memory loss that is often a transitional stage between normal aging and dementia.

"Not only are these individuals losing cognition, but they are showing many of the changes in the brain that are associated with Alzheimer's disease," said Robert Wilson of Rush University Medical Center in Chicago.

In prior studies, Wilson found that people who are more prone to distress are more likely to develop Alzheimer's disease than their more carefree counterparts.

"We now see that chronic distress is related to the first

clinical manifestation of Alzheimer's disease," he said.

People with mild cognitive impairment have some trouble remembering things, but they do not have significant disability. Not all people with this problem develop Alzheimer's disease, a much more serious impairment, but about 10 to 15 percent do, according to the Alzheimer's Society.

"What we're measuring is a personality trait that we all have to greater or lesser degree. We all experience anxiety and periodic depression. This trait helps identify people for whom that is more characteristic than others," said Wilson, whose study appears in the journal Neurology.

"This isn't a measure of stress, but of the response to stress," he said.

The latest research suggests that chronic stress may harm parts of the brain responsible for responding to stress — an area that is also associated with memory, he said.



Aerobic exercise may reverse signs of heart failure

In patients with heart failure, aerobic training can help the organ pump better, investigators report in the Journal of the American College of Cardiology.

In contrast, Dr. Mark J. Haykowsky and colleagues observed that strength training, either alone or in combination with aerobic training, appeared to be of no benefit. These opposing findings may underlie the inconsistent results of studies of exercise training in patients with heart failure.

Haykowsky, from the University of Alberta in Edmonton, and colleagues searched for relevant studies and identified 14 trials that assessed heart performance in 812 stable patients with heart failure. Nine trials evaluated aerobic training, four evaluated combined aerobic and strength training, and one involved strength training alone.

Aerobic training improved heart function significantly,

the results showed.

The positive changes occurred even though the patients were already on drugs proven to benefit heart function, Haykowsky's team observed. In fact, they found that the magnitude of improvement in heart function was similar to that achieved with standard drugs.

On the other hand, results of strength training, with or without, aerobic training were inconclusive.

In an editorial, Dr. Stanley A. Rubin, at the UCLA School of Medicine, urges caution before starting heart failure patients on an exercise training programme.

Rubin outlines the considerations to be taken into account when starting a patient on an exercise training program — including pre-training evaluation, as well as the type, degree, and venue of exercise training.

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Source: Journal of the American College of Cardiology

GSK to donate to WHO pandemic flu stockpile

GlaxoSmithKline (GSK) announced its intention to donate 50 million doses of H5N1 adjuvanted pre-pandemic influenza vaccine to the World Health Organisation in support of its stockpile initiative, says a press release.

The donation will help establish a much needed stockpile of pre-pandemic vaccines that can be distributed to the world's poorest countries at short notice by the WHO. Delivered over a three year period, it will provide enough doses of vaccine for 25 million people at injections per person.

As the WHO has made clear, pandemic influenza poses a serious global public health threat with substantial estimated morbidity and mortality. The WHO has expressed its desire to create an international stockpile of H5N1 pre-pandemic vaccines, a strategy which received the endorsement of the 193 member states in attendance at the World Health Assembly in Geneva last month.

In addition to the donation, the company confirmed its intention to provide additional doses of its H5N1 adjuvant vaccine at preferential prices to the WHO for GAVI-eligible countries following the necessary regulatory approvals.

GSK intends to provide the vaccine to middle and low-income countries at preferential prices reflecting individual countries income level.

Jean-Pierre Garnier, CEO of GSK said, "An outbreak of pandemic flu could have a serious devastating effect on some of the poorest countries on our planet. As a healthcare company, GSK takes seriously its responsibility to ensure access for the world's poorest people to our medicines and vaccines. This participation enables us to play a part in the WHO's efforts to coordinate a more comprehensive global solution to this potential healthcare crisis."



Servier Bangladesh Operations has launched Trimetazidine, an effective antianginal agent in modified formulation named Vastarel MR. On the launching ceremony, Professor Mario Marzilli from Italy discussed the new approach of treatment of stable angina with this drug at a local hotel in the city. Interventional cardiologist of BSMMU, Professor M Nazrul Islam presented a paper on management of ischemic heart disease while National Professor Brig.(Rtd) Abdul Malik chaired the session.



Sanofi-Aventis Bangladesh Ltd. organised a 'Meet the Experts' session in the name of "Diabetes and Hypertension: Control Does Matter" at a local hotel in the capital for the diabetic and cardiac patients who need counselling. Eminent diabetologists and cardiologists of the country answered different queries of the patients. Patients also shared their own experiences with each other and got inspired to follow healthy lifestyles.