

Angioplasty or bypass surgery: Which one you need the most

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Angioplasty, medically called PTCA (Percutaneous Transluminal Coronary Angioplasty) is a non-surgical procedure designed to dilate narrowed coronary arteries (arteries which supply blood to the heart muscles).

After angioplasty or atherectomy, a stent may be placed in the artery to improve upon the result. Stent becomes a part of body in about four weeks.

When we need PTCA?

Coronary angiography is simply a dye test showing the details of the narrowed coronary arteries. Your coronary anatomy and symptomatic status will guide a cardiologist to decide whether you need PTCA or a Coronary Artery Bypass Graft (CABG) surgery.

How is PTCA different from bypass surgery?

In bypass surgery, blood vessels from the chest or leg are grafted to the coronary artery beyond its most diseased segment. This lets the blood detour past the narrowing to reach the heart. In PTCA, however, the obstructed part of the coronary artery is widened rather than bypassed. Both operations achieve almost the same result.

Can everyone who has chest pain have PTCA?

No; whether you are a candidate for this procedure depends on a



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number of variables. The number of arteries showing blockages, number of segments blocked, type of blockage (focal or diffuse), diameter of vessels and functioning of you heart muscle etc. Only a doctor who is familiar with your case can determine the best form of treatment for you out of medication, PTCA or bypass. Will anyone ever need to have another PTCA? It is possible especially for those who do not take care of diet, exercise regimen, lifestyle etc. The dilated part of the coronary

artery may be re-narrowed in 15 to 20 percent of the subjects who have had PTCA earlier. If this happens to you, your doctor will advise you if the procedure should be repeated.

What are the risks involved?

Angioplasty has many of the same risks as coronary angiographies. An additional risk is that in less than 1 percent of cases — the artery being treated may close off suddenly in the initial few days after angioplasty. Very rarely

you may need an urgent bypass surgery.

Is it painful?

No, it is not very painful. About an hour before the procedure you will be given a sedative to help you relax. You may feel some chest heaviness when the balloon is inflated because blood flow in the artery is temporarily blocked. After the procedure, the place where catheter was inserted may be a little sore.

What should we do if need it?

You will come to the centre one or two days before the procedure for some tests. These may include an electrocardiogram (ECG), blood and urine tests and a chest x-ray.

When patients can do their normal activity?

You will be discharged after one or two days if you are feeling well and have no angina. Your doctor or his/her team doctor will talk to you about any guidelines you may have to follow and when you should come to follow-up visits.

You can go back to your nor-

mal activities after getting home. You will most likely be able to work within 2 weeks. Try not to overdo it first. Consult with your doctor before you start exercising or doing heavy work.

Check with the doctor within six months initially and then once every year. These visits help monitor your medication. Your doctor may suggest you to exercise tests and see your progress.

Immediately talk to a doctor if you have pain, swelling, redness, bleeding, or drainage at the insertion site, severe pain, coldness, or a bluish colour in the arm or leg into which the catheters were inserted or blood in your urine or black or tarry stools.

Do we need to change our lifestyle?

Your doctor may refer you to a cardiac rehabilitation or lifestyle management programme. This programme can provide guidance, classes, and support groups to help you:

- Get into exercise habit
- Quit smoking
- Lose weight
- Lower your cholesterol
- Lower your blood pressure
- Control diabetes
- Reduce stress
- Cope better with change

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WHO PHOTO

UN food standards commission met

Safer infant formula, hygienic egg production on the agenda

STAR HEALTH REPORT

New measures to ensure safer powdered infant formulae and hygienic egg production were discussed by the Codex Alimentarius Commission (CAC), attended by representatives from more than 100 countries.

The commission, in its annual session, is considering the adoption of several food safety and quality standards that countries depend on to safeguard the health of consumers, improve food quality and ensure fair practices in food trade. The commission is a body jointly set up by the UN Food and Agriculture Organisation (FAO) and WHO.

More nutritious infant formula

The revised standard for infant formulae and those for special medical purposes is based on the latest scientific understanding of the composition of breast milk.

"It is important to support breastfeeding and promote its benefits to infants and young children," said Dr Jorgen Schlundt, director of the WHO department of food safety, zoonoses and food-borne diseases. "However, in some instances, breastfeeding is either not possible or not appropriate. In these cases, one of the dietary options is the use of powdered formulae."

"Powdered infant formula is not a sterile product and can be contaminated with life threatening bacteria," said Dr Schlundt. "It is extremely important that these formulae are safe and properly labelled. The proposed standard

will help save many infant lives in countries around the world."

Eggs and egg products

They are a major source of food for people in all countries and there is significant international trade in these products.

However, eggs and egg products are a significant contributor to salmonellosis — a major food borne disease worldwide.

Making wine safer

Another draft code up for adoption would prevent or reduce Ochratoxin — a contamination in wine. Ochratoxin A is a mycotoxin known to be toxic to the kidneys.

Technical assistance

The FAO/WHO Codex Trust Fund supported some 34 developing countries to attend the Codex Commission.

"FAO and WHO supports the efforts of developing countries to strengthen their national food safety systems to protect local consumers and to take advantage of international food trade opportunities. They also enable developing countries to participate more effectively in Codex work," said Ezzeddine Boutrif, chief of the FAO Food Quality and Standards Service.

FAO and WHO launched a Framework for the Provision of Scientific Advice and also presented the Global Initiative for Food related Scientific Advice during the meeting.

The 30th session of the Codex Alimentarius Commission run from 2 to 7 July.

TRAVEL SAFETY

Study results released on travel and blood clots

WHO project finds VTE risk higher after long travel, but still relatively low

STAR HEALTH DESK

WHO has released results from Phase I of the WHO Research Into Global Hazards of Travel (WRIGHT) project.

Findings indicate that the risk of developing venous thromboembolism (VTE) approximately doubles after travel lasting four hours or more. However, the study points out that even with this increased risk, the absolute risk of developing VTE, if seated and immobile for more than four hours, remains relatively low at about 1 in 6000.

The two most common manifestations of VTE are deep vein thrombosis and pulmonary embolism. Deep vein thrombosis (DVT) is a condition in which a blood clot, or thrombus, develops in a deep vein — usually in the lower leg. Symptoms of DVT are principally pain, tenderness and swelling of the affected part. DVT can be detected through medical testing and can be treated. It can

be life-threatening when associated with thromboembolism.

Thromboembolism occurs when a blood clot (from a deep vein thrombosis) in a leg vein breaks off and travels through the body to the lungs where it becomes lodged and blocks blood flow. This is known as pulmonary embolism, and symptoms include chest pain and breathing difficulties. VTE can be treated, but if it is not, it can lead to death.

The study showed that plane, train, bus or automobile passengers are at higher risk of VTE when they remain seated and immobile on journeys of more than four hours. This is due to a stagnation of blood in the veins caused by prolonged immobility, which can promote blood clot formation in veins.

One study within the project examining flights in particular found that those taking multiple flights over a short period of time are also at higher risk. This is because the risk of VTE does not

go away completely after a flight is over, and the risk remains elevated for about four weeks.

Other factors of influence

The report shows that a number of other factors increase the risk of VTE during travel, including obesity, being very tall or very short (taller than 1.9 meters or shorter than 1.6 meters), use of oral contraceptives, and inherited blood disorders leading to increased clotting tendency.

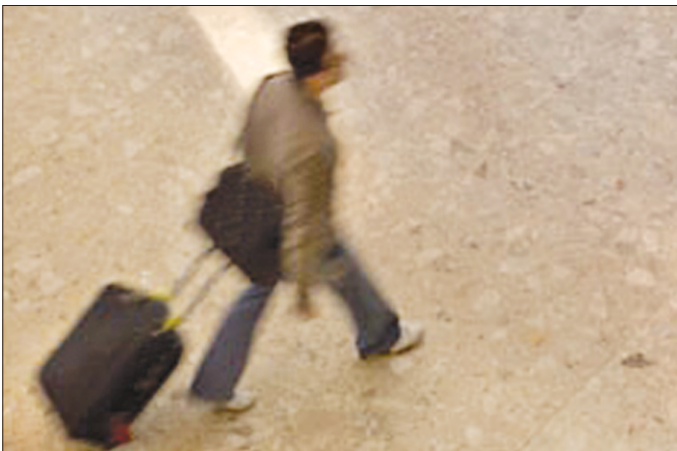
"The study does confirm that there is an increased risk of venous thromboembolism during travel where the passenger is seated and immobile for over four hours, whether in a plane, train, bus or car. However, it is important to remember that the risk of developing VTE when travelling remains relatively low," says Dr Catherine Le Galès-Camus, WHO Assistant Director-General for Noncommunicable Disease and Mental Health.

This study did not investigate effective preventive measures against DVT and VTE. However,

experts recognise that blood circulation can be promoted by exercising the calf muscles with up-and-down movements of the feet at the ankle joints. Moving feet in this manner encourages blood flow in the calf muscle veins, thus reducing blood stagnation. People should also avoid wearing tight clothing during travel, as such garments may promote blood stagnation.

Phase I of the research project concludes that there is a need for travellers to be given appropriate information regarding the risk of VTE by transport authorities, airlines, and medical professionals. Further studies will be needed to identify effective preventive measures. This will comprise Phase II of the project, which requires additional funding before it can begin.

Individuals with questions regarding prevention of VTE should consult their physicians before travelling.



High altitude flights spark symptoms

Feeling a little achy, lightheaded or short of breath on a long plane flight? A new study suggests you might be suffering from a mild form of altitude sickness.

Until now, such symptoms had been attributed to jet lag, dehydration, air contamination or being stuck in a cramped seat for hours.

Researchers report that true altitude sickness — with its nausea, vomiting and sleep disturbances — was no more likely in volunteers in simulated airplane cabins where the pressure was equivalent to 8,000 feet above sea level than it was when the pressure was closer to sea level.

But after three hours of exposure to cabin pressures equivalent to 7,000 to 8,000 feet, the simulated fliers were more likely than others to report backaches, headaches, shortness of breath, light-headedness and impaired

coordination.

Women and younger people were the most likely to experience symptoms.

"On the basis of our findings, we conclude that maintaining a cabin altitude of 6,000 feet or lower (equivalent to a barometric pressure of 609 mm Hg or higher) on long-duration commercial flights will reduce the discomfort among passengers," wrote Michael Muhm and colleagues at the Boeing Company, which financed the study.

Typically the pressure in the cabin is equivalent to 5,500 to 7,500 feet above sea level and designing an aircraft to withstand a cabin pressure equivalent to a lower altitude would add to the cost of the plane.

Source: New England Journal of Medicine

Did You Know



Cats may be trouble for any allergy sufferer

People with allergies may have some constriction in their airways when they are around a cat, even if they are not specifically allergic to cats, a study suggests.

Researchers found that people with a range of allergies — to grass, mold or dust — were more prone to airway constriction if their homes were heavy with cat dander. This was true even when blood tests showed the allergy sufferers were not specifically sensitised to cats.

While the airways of the lungs naturally constrict to some degree in response to an irritant, exaggerated responses are seen in lung conditions like asthma.

If the new findings are correct, people with any type of allergy would do best to avoid cats, according to the study authors.

However, it is too soon to put Fluffy in a new home just yet. The findings were unexpected, lead researcher Dr Susan Chinn told, so they need to be confirmed in additional studies.

Chinn, a research fellow at Imperial College London, and her colleagues report the findings in the American Journal of Respiratory and Critical Care Medicine.

The study included 1,884 adults from 20 areas across Europe. Researchers went to participants' homes to

take measurements of dust mite and cat allergens, and all underwent blood tests to detect allergies to any of four substances: cat dander, dust mites, grass or mold.

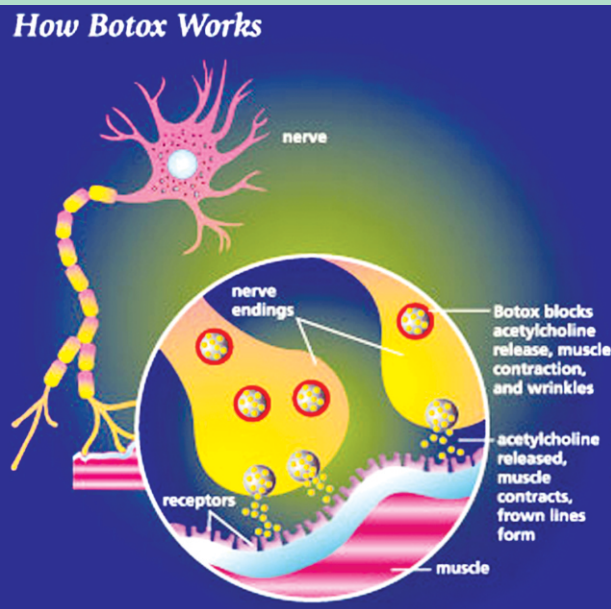
Study participants were also given tests of bronchial responsiveness, which refers to the degree of airway constriction in response to an irritant — in this case, a chemical called methacholine.

Chinn's team found that allergy sufferers, regardless of type, showed greater airway constriction on these tests when their homes contained a relatively higher amount of cat dander. There was no similar pattern when it came to dust mite exposure, however.

If these findings are confirmed in future studies, people with any type of allergy may need to limit their contact with cats, according to Chinn.

That might even mean avoiding cat-friendly neighborhoods, she noted. In an earlier study, Chinn and her colleagues found that the level of cat allergen in non-cat-owners' homes depended on the number of cats in the neighborhood.

Source: American Journal of Respiratory and Critical Care Medicine, July 1, 2007



Botox shots may help kids with cerebral palsy

As a treatment for muscle stiffness in children with cerebral palsy, shots of botulinum toxin A, best known by the brand name Botox, are safe and produce measurable improvements in function, according to a new study. However, patients and their families may not perceive the improvements as very meaningful.

The muscles of people with cerebral palsy are often stiff, contract spontaneously and over-react to stimulation, a characteristic called spasticity. Injection of Botox helps to reduce spasticity and allows the person a greater degree of control over muscle movement.

However, impact of the treatment has been difficult to assess because of the scarcity of reliable measures of spasticity and problems in measuring changes in function in children with disabilities.

In a controlled study, Dr. Kristie Bjornson, of Children's Hospital and Regional Medical Center in Seattle, and colleagues examined the effects of Botox shots versus placebo in 33 children with spastic diplegia — a form of cerebral palsy where both the arms and legs have abnormal stiffness. Outcomes were measured at baseline and 3, 8, 12, and 24 weeks after injection.

Overall results showed that the physiologic and mechanical effects of treatment with Botox are "genuine and measurable" in children with spastic diplegia cerebral palsy.

"However, these effects may not create enough change in the patients' function or the families' perception of function to register as a meaningful improvement in their societal participation," the authors note.

"It is possible that these changes were too subtle to be recognized with conventional satisfaction measures," they write.

The investigators say their findings suggest that expectations about Botox shots should be realistic.

Source: Pediatrics July 2007