

Managing angina without surgery

MD RAJIB HOSSAIN

There are several modern invasive tools cardiologists are using to treat angina (chest pain) including angioplasty (blowing up balloons to expand the artery at sites of block), stenting (insertion of cylindrical wire mesh tube prop open the blocked artery) and bypass surgery (increasingly through very small incisions). But drug therapy may be just as effective to restore blood flow as invasive surgery for stable angina, a new analysis published in *The New England Journal of Medicine* suggests.

Angina is chest pain or discomfort that occurs when an area of heart muscle does not get enough oxygen-rich blood. It is often a warning sign of an impending heart attack. If a coronary artery (arteries which supply blood to heart) becomes blocked, either by fatty material or a blood clot, then part of the heart muscle is starved of oxygen. Due to blockages in the heart's arteries, affected person may feel like pressure or squeezing in chest. The pain also may

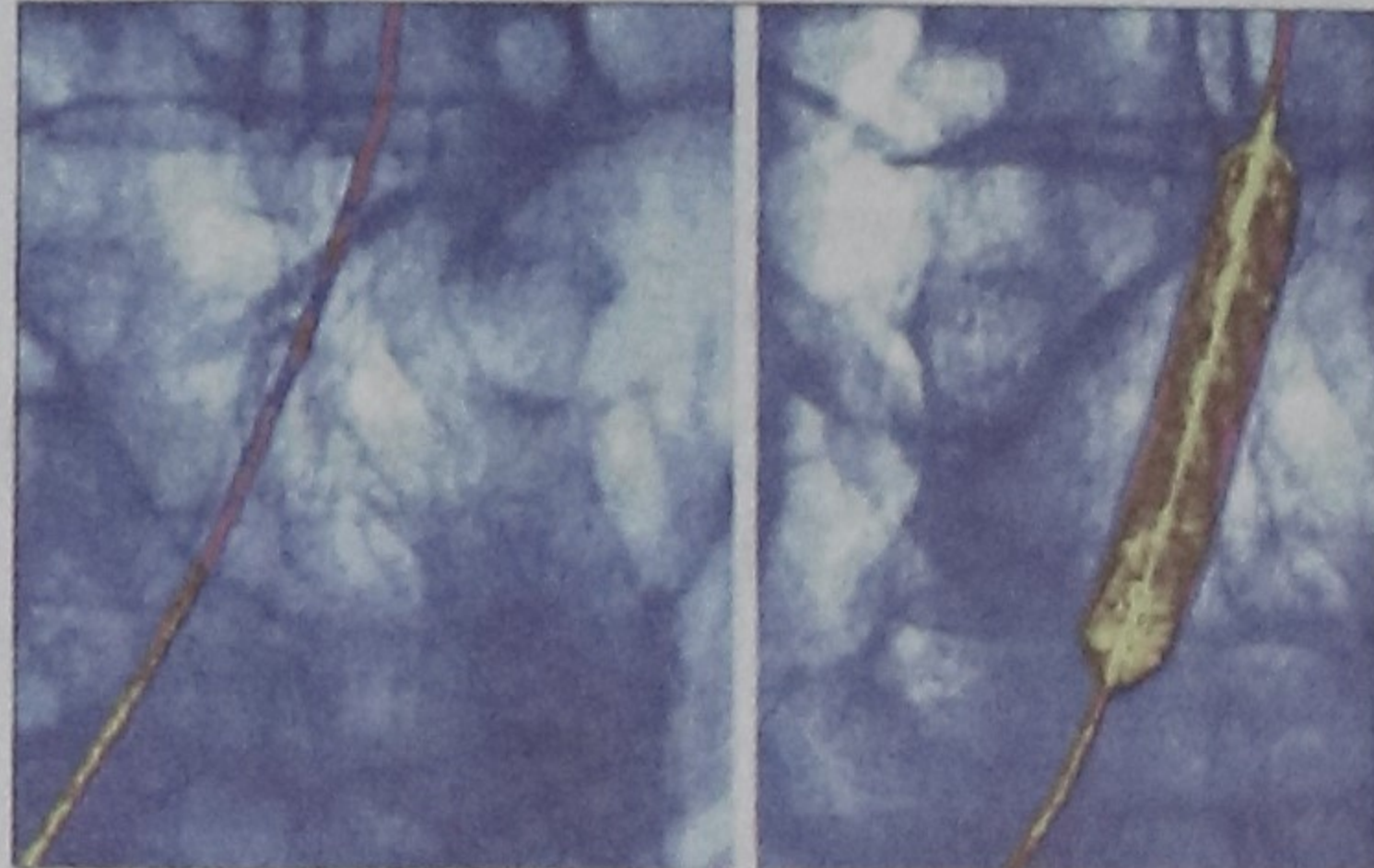
occur in shoulders, arms, neck, jaw, or back. It can feel like indigestion.

Invasive treatments are found to relieve symptoms decisively in most patients. They actually prevent impending heart attacks and deaths only in special circumstances notably, when patients are treated within a few hours of an acute heart attack.

On the other hand, simple and cost-effective drug treatment can give patients the same advantage. Cardiologists now have several effective classes of drugs that have the estimable ability to reduce the heart's workload, improve blood flow by dilating arteries, and increasingly target the diseased artery itself.

Often, patients and their physicians confront when to turn to the invasive strategies that have long been a mainstay of angina management. A recent analysis of data from pivotal clinical trial called COURAGE provides some important new insights.

In this study, over 2,000 patients with stable angina were randomised into groups receiv-



Drug therapy may be as effective as angioplasty, above, or other invasive interventions used to manage angina, new research suggests.

ing aggressive drug therapy with or without additional angioplasty and stenting. The primary results, published in 2007, showed no additional benefit to invasive treatments with regard to heart attack or deaths in the group during 4.6 years of follow-up.

The new data, published last month in *The New England Journal of Medicine*, revealed

whether adding invasive treatment to intense medical treatment reduced the frequency of angina and improved quality of life and well-being in these patients.

Shortly after treatment, the patients who had invasive revascularisation reported slightly less angina and slightly better quality of life. But by the end of the 4.6 years of follow-up,

the patients who did not receive invasive treatments were faring as well as those who did (although about one-fifth of those originally treated without surgery ultimately required mechanical revascularisation).

From the expert analysis on the study we can learn two important lessons. First, starting aggressive therapy, be it with drugs or drugs plus surgical revascularisation, improved symptoms and quality of life in both groups promptly in the case of surgical revascularisation, but rapidly even for drug therapy alone. This is extremely good news for patients with angina: modern therapy is quick, effective and results in an excellent quality of life in most individuals.

The surprising and progressive benefit of non-invasive therapy may come about because some of the newer drugs favorably alter the biology of the artery and plaque (fatty deposits). Several drugs notably statins and agents that interrupt the action of the hormone angiotensin (causes blood vessels to con-

strict, and drives blood pressure up) are quite effective. Statins lower bad cholesterol (LDL), one of the drivers of atherosclerosis, and also appear to calm inflammation in the plaque independent of effects on LDL. Blocking angiotensin action may also provide a benefit to arterial health beyond just lowering blood pressure.

The second message: we do not need to rush into surgery as a first step in people with stable angina. Along with drug therapy lifestyle changes like quitting cigarettes, losing excess body fat, switching to a low fat diet and taking regular exercise (such as walking every day) can significantly improve the condition. They can help dampen the need of surgery. Invasive strategies are only needed if these non-invasive measures are proved to be ineffective. These new data, in the context of many other studies, will help cardiologists to take a staged approach to the management of stable angina with confidence that this implication does not jeopardise longevity or increase risk of heart attacks.

Vitamin B12 may protect against brain shrinkage

REUTERS, Washington

Having higher vitamin B12 levels may protect against brain shrinkage in elderly people, according to a study published recently.

The researchers called their findings striking, but said more information is needed before recommending that people take vitamin B12 supplements to guard against the loss of brain volume and possibly prevent declines in thinking and memory.

In the study led by David Smith and Anna Vogiatzoglou of the University of Oxford in Britain, people in the upper third of vitamin B12 levels were six times less likely to experience brain shrinkage than those in the lowest third.

The study involved 107 healthy people ages 61 to 87 who underwent scans to measure brain volume and gave blood samples to assess vitamin B12 levels once a year for up to five years.

"Our study suggests, but does not prove, that by modifying our vitamin B12 status we might be able to protect our brain and so possibly prevent cognitive decline. So, we think it is too early to advise people to take B12 supplements to prevent their

brains from shrinking," said Smith, who heads the Oxford Project to Investigate Memory and Ageing.

"What we can say is that our results suggest that rather than maintaining one's B12 at a level that is just above the cut-off for deficiency, it might be prudent to aim to keep it higher up the normal range," he added.

Smith pointed out that could be achieved by eating plenty of foods that are a good source of vitamin B12 such as milk and other dairy products, fish, meat and fortified breakfast cereals.

Vitamin B12 helps in the formation of red blood cells and is important for the maintenance of the central nervous system. Deficiency can lead to anemia and neurological damage.

Smith said another study from Oxford that came out last year showed that lower vitamin B12 levels — but still within the normal range — were linked to cognitive impairment and a higher risk of later cognitive decline.

Vitamin B12 deficiency is a significant issue among the elderly due to problems in vitamin absorption and among vegetarians whose dietary intake may be low, the researchers said. It is a serious problem in less developed parts of the world.

Herpes drug may help control AIDS virus

REUTERS, Washington

A cheap, generic drug long used to treat herpes may also help control the AIDS virus, U.S. researchers reported recently.

They found that acyclovir can work against HIV, but only in tissues that are also infected with herpes.

The findings, published in the journal *Cell Host & Microbe*, help explain why some studies have shown that people taking acyclovir have lower levels of HIV, yet others show that taking acyclovir does not prevent infection with the AIDS virus.

The herpes virus itself changes the drug into a form that can work against HIV, said Dr. Leonid

Margolis of the National Institute of Child Health and Human Development, who helped lead the study. "If you suppress herpes, HIV also goes down," Margolis said.

Acyclovir was the first drug to be designed and made synthetically, without the use of any compounds from plants or animals, Margolis said.

It is also very safe, as it does not become active until it encounters a herpes virus — usually herpes simplex 2, the strain that causes genital herpes. The virus completes a chemical reaction called phosphorylation, turning the acyclovir into an active compound.

Researchers had noticed that patients with HIV who also took

acyclovir for herpes infections tended to have less virus in their blood, a measure called viral load. The lower the viral load, the healthier an HIV patient is.

But several high-profile experiments aimed at preventing HIV infection by treating patients for herpes failed.

Margolis thinks he knows why. "If you test acyclovir against HIV in pure cell lines, it doesn't work," he said.

And in the prevention studies, doctors were trying to completely suppress herpes. "If you suppress herpes virus completely, there is nothing to phosphorylate," he said. So perhaps lower or more infrequent doses might be more

effective, he said. This will have to be tested.

And the good news is that a patient does not have to be infected with genital herpes to benefit. Any herpes virus will do, including HHV6 and HHV7, viruses that cause a nearly universal childhood infection sometimes called roseola.

Like HIV, herpes takes up permanent residence in the body and cannot be eliminated. But drugs can suppress both to prevent symptoms. Adding acyclovir to the cocktails used to treat HIV may strengthen the mix, Margolis said.

HIV infects 33 million people globally. It has killed 25 million and there is no cure and no vaccine.

Does cancer have an answer?

Singaporean doctors talked about the recent advancement

DR TAREQ SALAHUDDIN

Does cancer have an answer? To many people, cancer is a terrifying disease, which they hope not to get, and prefer not to think or talk about. But in reality, cancer is neither uncommon nor is it untreatable. Some types of cancer can be completely cured. With many other types, early diagnosis and proper treatment makes a big difference.

Two most prominent specialists from Parkway Cancer Center, Singapore shared view with few health journalists of Bangladesh at a local hotel in the city recently. Dr. Lee Kim Shang, Senior Consultant Radiation Oncologist and Dr. Foo Kian Fong, Senior Consultant Medical Oncologist of Parkway Cancer Center (PCC) at Mount Elizabeth Hospital and Gleneagles Singapore came to Bangladesh as the guest speakers to deliver medical talks on "Advancement in treatment of Cancer" in an international seminar jointly organised by Ahsania Mission Cancer Hospital and Parkway Health, Singapore.

In the last fifty years, many remarkable advances against cancer have been seen. These advances have benefited patients all over the world. However, cancer still remains to be the top killer in the world. Thankfully, in Singapore and more particularly at Parkway Cancer Center, under the group Parkway Health hospitals, the survival of patients with cancer is also improving. This improvement is accredited to many advances in medicine, such as the introduction of more sensitive computer-assisted imaging, development of monoclonal antibodies and other targeted therapies, the identification of cancer-associated genes. That is why Parkway Health feels that it is important for the Bangladeshis to be aware because knowledge empowers patients to seek appropriate treatment early, and that,



Dr. Foo Kian Fong

holds the key to successfully battling cancer.

Since non-communicable diseases like cancer is getting more related to our urban lifestyle, PCC is organising health awareness seminars for the professionals in different business organisations very recently to create awareness among them and for better understanding about dealing with cancer.

Cancer is a major illness and is the leading cause of death in most part of the world but not everyone who gets cancer will die from it. Is it due to our hectic or bad lifestyle habits? Has richer dietary patterns and smoking which has exposed us to carcinogenic (cancer-causing) substances?

In the case that cancer still develops, spotting it in its early stages will give the best chances of beating it. On our part, we need to be aware of changes in our body. This may help detect cancer early and increases our chances of successful treatment. One should go for regular health screening tests especially for those who are considered high risk with family history of the disease.

Cancer management and medical breakthroughs are making cancer more manageable. Chemotherapy may be used



Dr. Lee Kim Shang

alone or with combination treatment such as radiation therapy or surgery depending on the severity of the disease.

The mission of Parkway Cancer Centre (PCC) is to provide a comprehensive and integrated premier cancer service that is patient focused with utmost care, comfort and compassion along with their commercial services. They shared with the people of Bangladesh with PCC's knowledge and approaches in the advances of cancer treatment to achieve better awareness for patients to seek appropriate treatment early, and that, holds the key to successfully battling cancer.

Parkway Cancer Centre (PCC), Singapore provides a non-profit cancer counseling service and hotline named "CanHOPE". Through CanHOPE, both patients and the general public receive accurate cancer information, its related screening tests, treatment and other services. PCC believes that cancer is not only a physical ordeal; it is also an emotional one, affecting cancer patients, their family and friends. To help address these emotional needs, they offer resources to help patients and their loved ones cope in this difficult time. People can write to CanHOPE@parkway.sg for cancer

related any information.

During a brief interview, Dr Foo Kian Fong share about the causes and prevention of cancer and advances of cancer treatment. He also touched on what is the disease cancer, the risk factors associated with cancer, prevention and early screening.

Dr Lee Kim Shang, Senior Consultant Radiation Oncologist shared about the TomoTherapy in cancer treatment, introducing TomoTherapy treatment towards a higher cure rate with lesser side effects.

He said that the treatment of cancer is a multi-modality approach, involving surgery, chemotherapy, radiation and biological approaches. Radiation remained an integral part of treatment for many cancers, both for curative and palliative intent. The techniques of radiation continue to be refined, so that cure rates are increased while morbidities declined.

The goal of radiation, as in surgery, is to eliminate the cancer cells completely with the least possible damage to normal tissues. Advances in radiation dosimetry, treatment planning and delivery and verification have allowed for increased precision, dose escalation and reduced toxicity.

TomoTherapy is developed as a new revolutionary way to deliver intensity-modulated radiation therapy to treat tumors. It combines precise 3D imaging from computer tomography for precise localisation of tumors prior to each daily helical treatment delivery. This image guidance allows for increased confidence level in sparing normal tissues from high dose radiation and at the same time permitting dose escalation into tumor tissues.

They concluded that cancer does have an answer. Some types of cancer can be completely cured. We need not live in denial or ignorance of this disease!



DR RUBAIUL MURSHED

All health information to keep you up to date

Never eat alone!

It is said that 'the family that prays together stays together', but we can add 'eating together' is another way to build up and improve family bonds. As well as inviting neighbours, friends and relatives during meal-time has a surprising power. It does not matter what meal you are having! It could be simple fish, vegetables and dhal but it is the simple act of sitting at the same table and eating rice or tea together.

The pleasures of sharing during eating are unparalleled. The sharing of food with neighbours, relatives, friends, the needy, and the destitute is also emphasised in religions. Eating with others bring about harmony and understanding among people. People are usually more relaxed when eating in company. Their minds are less absorbed in their daily activities and are free of worries. However, these gatherings are not only a time for strengthening relationships and keeping track of family members or relatives, they can truly lead to better physical and mental health for all family members.

There are health benefits of eating together. During that time we usually eat slowly. Eating slowly is recommended for health. This reduces the consumption of food. This also helps in chewing the food well. Slow eating effects in the exercise of the jaws and mixing of the saliva with food. Hence, efficient digestion takes place because the food particles are cut into smaller pieces, not requiring as much mixing in the stomach or intestine.

According to a University of Minnesota study, frequent family meals are related to better nutritional intake, and a decreased risk for unhealthy weight control practices and substance abuse. A Harvard study showed that eating family dinners together most or all days of the week was associated with eating more healthfully. The study

revealed that families eating meals together generally consumed higher amounts of important nutrients such as calcium, fiber, iron, vitamins (B6, B12, C and E) and consumed less overall fat, compared to families who never or only sometimes eat meals together.

According to a Lou Harris-Reader's Digest national poll of high school seniors unveiled that children who frequently eat meals with their families tend to do better in school.

In our childhood we were used to this culture. For generations it has been a basic human ritual, but today the scenario is different. Everyday family lunch is no longer a practice. Sometimes parents pressured by more than one career are on the run. And ultimately families do not dine at a common table. In fact, eating together is not just eating a meal. It is important because it gives children reliable access to their parents. It highlights the significance of the neighbours, friends and relatives. It reminds the child that they are part of it. And a child's belongingness in its family contributes to his spirit and stability. It has been noticed that good table manners are missing nowadays from some of our children. But good manners are essential to success.

According to researchers, there is an ongoing learning process at the family dinner table. Taking time to prepare and serve an appetising meal at home can help children eat healthy food with lower fat, lower sodium and higher nutritional values. Thus, we can escape from unhealthy fast food. Having the family together for at least one mealtime each day gives parents and teens a chance to attach. It is a good time to check in with each other. But remember, do not shout and fight during eating — keep the mood light, relaxed and try not to instruct or criticise.



Early diabetes treatment key for long term health

People with diabetes given intensive drug treatment soon after diagnosis are healthier when they grow older, even if they become less rigorous about controlling their blood sugar later on, British researchers expressed.

This means it may be important to prescribe diabetes drugs early, even for people just diagnosed with type 2 diabetes, instead of trying to get them to diet and exercise first, the researchers reported in the *New England Journal of Medicine*.

"We now know not only that good glucose control from the time type 2 diabetes is diagnosed reduces the rate of diabetic complications but also that this early intervention leads to sustained benefits in the longer term," Rury Holman of Oxford University, who led the study, said in a statement.

In type 2 diabetes, the body gradually loses the ability to use insulin properly to convert food to energy. Sugar levels shoot up, which can damage the eyes and kidneys, and cause heart disease, stroke and limb amputations.

Very strict diet and vigorous, regular and sustained exercise can reverse type 2 diabetes, but

can be difficult for many people. Several different classes of drugs are on the market for type 2 diabetes.

People given generic drugs in the sulfonylurea class to get their blood sugars down to desired levels had a 15 percent reduced risk of heart attacks and were 13 percent less likely to die than volunteers assigned to control their diabetes mostly with strict diet, the study found.

The impact was greater for people taking metformin, who had a 33 percent reduced risk of heart attack and were 27 percent less likely to die than those in the diet group. Metformin is sold generically and as Bristol-Myers Squibb's Glucophage.

The follow-up of 3,277 people who participated in the original study show these health benefits lasted for at least 10 years even when differences in blood sugar control disappeared.

The researchers also found that lowering blood pressure is the key to minimising diabetic complications but — unlike with blood sugar — the benefits do not increase over time.

Source: *New England Journal of Medicine*

Awareness programme on women health

STAR HEALTH REPORT

With a view to raise awareness and increase level of knowledge about women's common health problems, Singhealth, Singapore's largest group of healthcare institutions and Zonta Club, Dhaka III have jointly organised a seminar at a local hotel in the city, says a press release.

Dr Chia Shi Lu, Consultant Orthopedic surgeon of Singapore General Hospital and Dr Lim Soon Thy, Consultant Medical Oncologist of National Cancer Centre spoke in the seminar as keynote speakers.

