

MARUTHUVA VIVEKAM

Doctors Advice - For a Healthier Life



Step it Up!

Walk your way to health

New

*Using Technology
for You*

New 64 Slice CT Scanner

THE SILENT KILLER

No pain. No sweat. No symptoms.
The silent heart attack is a deadly killer.

From the Chairman's Desk



Dear friends,

Great strides have been made in preventive medicine. Technology is playing a major role in this area. Take, for instance, the latest 64 Slice CT scanner we have recently acquired. In a non-invasive procedure, and in a matter of seconds, with utmost comfort to patients, it allows us to detect the beginning of illness anywhere in the body. This is only one example of new generation technology that is coming to medicine. We hope to stay on the forefront of it. Still, as you all know, the best preventive medicine is eating moderately, exercising regularly and controlling stress.

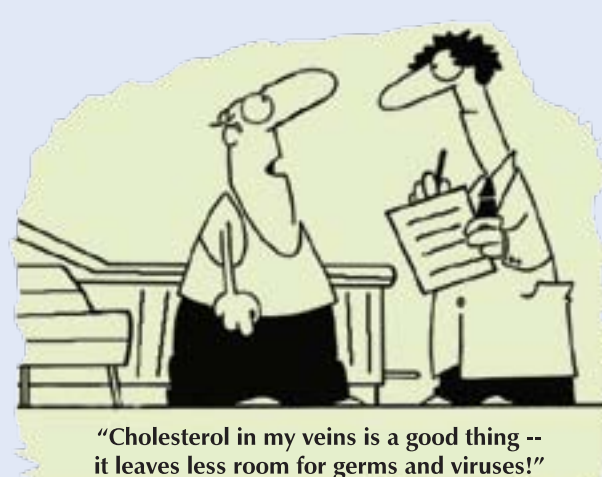
I hope you enjoy this issue which is dedicated to the heart. As always I am eager to hear from you. You can reach me at www.miot@vsnl.com

Goodbye and Good Health!

Mallika Mohandas

Mrs. Mallika Mohandas
Chairman, MIOT Hospitals

Laughter is the Best Medicine



Front Piece

How I saved my Sambandi from a massive heart attack!

Prof. Dr. P.V.A. Mohandas

One Sunday morning, my sambandi rang up to excuse himself from attending the Sunday family luncheon. He had been to a Freemason's dinner the previous evening and felt that he had eaten too much. He complained of a vague feeling of discomfort in the epigastric region (just below the middle of the chest) and said that he was not feeling well at all.

I had learnt in my training days in the United Kingdom, that pain in the epigastric region has to be viewed seriously and not brushed aside.



I told him to come to the hospital immediately, to rule out the possibility of heart disease.

He came at once to MIOT and underwent an ECG. It was normal. After 4 hours we repeated the



ECG. This time it showed changes. Next, we fixed up a coronary angiogram. The result showed a deadly 3-vessel block!

We admitted him at once and within 4 days he underwent a Coronary Artery Bypass Surgery.

This incident brought home to me the casual way in which many people dismiss or ignore early symptoms of potentially dangerous illness. After this incident I had a board installed in the Out Patient Department, that all patients with upper abdominal discomfort, must have an ECG taken, and repeat it every four hours. They should also have cardiac enzymes done and

not be discharged for 24 hours.

Thanks to this we have been able to diagnose many patients in time and save their lives.



MIOT Keyhole
SURGERIES

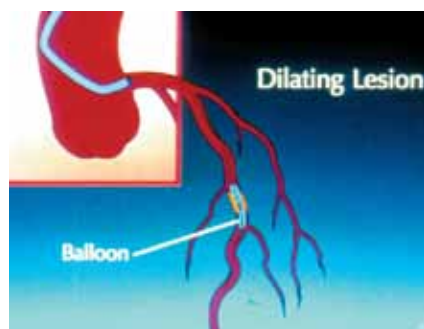
For more information visit : www.miothospitals.com

Everything you should know about Angioplasty

With angioplasty becoming more and more popular, Dr. Manoj explains the facts and procedures behind "the balloon wonder".

Q) I have been advised to undergo an angioplasty. What is an angioplasty?

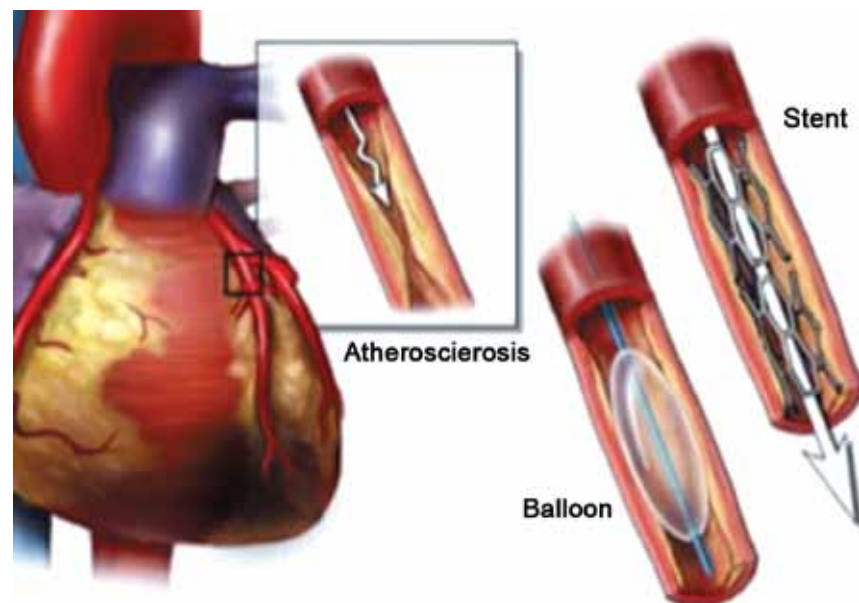
A) Coronary angioplasty (AN-je-o-plas-te) is the most commonly done treatment on a day- to-day basis. When medications or lifestyle changes aren't enough to reduce the effects of blockages in your arteries, or if you have worsening chest pain or heart problems, your doctor might suggest coronary angioplasty.



Q) What does the procedure involve?

A) After a heart attack or chest pain (angina), the cardiologist performs an angiogram to see how many coronary blocks a patient has. Generally single or double vessel blocks are cleared through angioplasty. However, in certain cases, **3 or more blocks** can also be treated by angioplasty.

During the procedure, the cardiologist introduces a miniaturized balloon through the



catheters into the site of the coronary artery block. Then the narrowed part of the artery is expanded using the balloon. In most cases, a mesh tube (**stent**) is also placed inside the artery to hold it open more widely and prevent re-narrowing in the future. At the end of a successful angioplasty, the narrowed part of the artery is fully opened and restores normal flow of blood to the heart, which relieves the patient of heart attack/angina.

Q) Is angioplasty a full-fledged surgery?

A) Coronary angioplasty isn't considered surgery because it is a lot less invasive - your body isn't cut open. In fact technological advances have made it possible for the procedure to be carried out through a **< 2.0mm 'pin-hole' access**. It does not require any stitches or general anaesthesia.

Q) Can anyone at any age undergo angioplasty?

A) There is generally no age bar for undergoing angioplasty.

At MIOT Hospitals, we have treated people as young as 18 years and as old as 96 years. This is possible because no general anaesthesia is necessary for the procedure.

Q) What are stents?

A) A coronary stent is a stainless/alloy tube with slots. It is mounted on a balloon catheter in a collapsed state. When the balloon is inflated, the stent expands or opens up and pushes itself against the inner wall of the coronary artery. This holds the artery open when the balloon is deflated and removed. Stents provide added support and remain in the artery permanently, to hold it open and improve blood flow to the heart.

Q) What are medicated stents?

A) Stents can be coated on their surface with medications, that are then slowly released into the vessel wall to help prevent arteries from relogging. These coated stents are called drug-eluting stents.

Article

Q) What happens to the stent that is permanently left inside the artery?

A) The stent is completely covered by natural tissue in a matter of 4 - 6 weeks. A stent once successfully functioning will remain open forever. There is no phenomenon of rejection or adverse or allergic reactions due to the stent.

Q) How successful is coronary angioplasty?

A) In the hands of an experienced cardiologist, and with modern day technology, it is estimated that the risk of death during a stent procedure is usually < 0.5%. Successful angioplasty also means you might not have to undergo an invasive coronary artery bypass surgery where recovery may take months and will be more painful.

Q) How long does the procedure take?

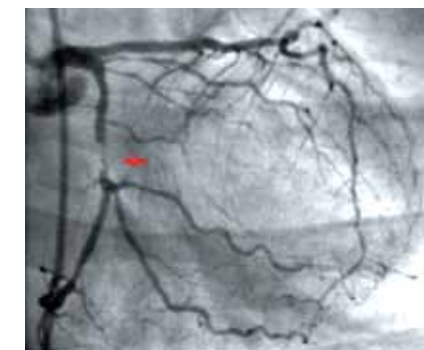
A) It can take anywhere from 30 minutes to an hour to perform the entire case. The duration will depend upon the number of blockages that need to be treated.

Q) How long will it take to recover from an angioplasty?

A) You will probably be hospitalized for a day or two. You must keep your leg still for about six hours or so. Your heart will be monitored for 12 to 24 hours after the procedure, and your vital signs will be checked frequently. Your doctor is likely to prescribe medications to prevent blood clots and relax your arteries. You should be able to return to work or your normal routine, 2 or 3 days after angioplasty.

Q) What special treatment is needed after a coronary stent procedure?

A) Special precautions have to be taken to prevent them from being covered with clot. A combination of medications is started either before



Before angioplasty



After angioplasty

or during the procedure.. Medication is usually stopped in a few weeks because the stent is usually completely covered by natural tissue and the risk of clot formation is nearly absent by that time.

Q) Is life better after an angio?

A) For most people, coronary angioplasty greatly increases blood

flow through the previously blocked artery. Your chest pain should subside and you will have a better ability to exercise.

Dr.S.Manoj
Head - Dept of Cardiology,
Specialist in Interventional
Cardiology

HEART FACTS

- The heart beats about 1,00,000 times a day.
- The heart beats 35 million times a year and 2.5 billion times in our lifetime.
- It pumps out 5-6 litres of blood per minute (i.e) one million barrels in our lifetime!
- It pumps blood covering a distance of about 18,000 km /day.
- Major causes for death all over the world:
 1. HEART DISEASES
 2. ACCIDENTS
 3. CANCER
- Most common Heart Disease causing death is HEART ATTACK.
- About 30 million people suffer heart attacks all over the world, every year.
- About 10 million people die before medical intervention.
- Coronary Artery Disease - The Indian Reality
 - Highest incidence in people of Indian origin
 - Early onset – 25 years of age
 - 2.5 – 5 times higher rate of heart attack
 - Higher death rate among Immigrant Asian Indians in USA / UK
 - Rich diets and sedentary life style

The Silent Killer

Is silence golden? Well not in the case of heart ailments. Dr. Manoj tells us about the “greatest silent killer of mankind” and how we can stop it.



It was 3 a.m. in the year 2002. A triumphant Brazil had just nailed the World Cup. Professor of Medicine Dr. Khanna (53) saw the award ceremony to its conclusion and headed for bed. As he was usually an early riser, his wife was surprised to see him still in bed at 6.30 am. She gently shook him and discovered to her horror that there were absolutely no signs of life. Between 3 a.m. and 6 a.m. Professor Khanna had departed this world. With no alarm, no sound, no signal of anything untoward, Professor had died of a sudden massive silent heart attack.

Professor Khanna was the Head of my Medical Speciality. At that time I was a medical student. “How could a heart attack be silent?”, I wondered. “Isn’t a heart attack to be accompanied by well known symptoms like very intense, crushing

central chest pain, breathlessness and feelings of panic? How could such a fatal attack be “silent” and most importantly, how could we know who would suffer this?”

What makes a heart attack “silent”?

Any heart attack that occurs in the absence of chest pain is referred to as a “Silent Heart Attack.” The normal pain associated with the onset of a heart attack may not be perceived because of neuropathy (neurological defect). Pain fibres are diseased in certain conditions like diabetes mellitus, age related degeneration seen in the elderly, advanced and neglected hypertension (high BP).

Who are at risk?

- Those who suffer from diabetes mellitus

- Those who are elderly
- Those who have had a previous heart attack
- Those who suffer from very high BP
- Those who have very high blood cholesterol, especially the type that runs in the family
- Strong family history of premature heart disease
- A strong family history of any sudden cardiac death among close relatives

A Warning to Diabetics



Heart disease develops at an accelerated pace and therefore appears at a very early age in diabetic subjects. Diabetic men and women should beware! Up to 25% of diabetics who’ve had a heart attack never feel the warning symptoms. Damage to nerves that affect the heart (autonomic neuropathy, or AN) could be the culprit.

So how to detect a silent heart attack?

Some of the symptoms you should watch out for are - unusual shortness of breath, tiring easily,

Case Study



discomfort in your chest, jaw, or arms that give way when you rest, unusual sweating, loss of consciousness.

We also strongly recommend that

you undergo periodic **Preventive Health Check** ups that would include tests like: ECG, Treadmill stress test and/or Echocardiography along with a physician’s consultation.

A novel addition to early detection of silent heart disease – is by undergoing an ultra-fast **64 slice CT coronary angiography scan**. This state-of-the art investigation tool tells us whether there are any fatty plaques in your arteries of the heart and their location, as well as the narrowing it produces in the vessel. It shows the result in 7 – 9 seconds and is done as an out-patient procedure. This test is strongly advised especially for diabetic people.

24-hour Holter ambulatory ECG monitoring study. ECG terminals

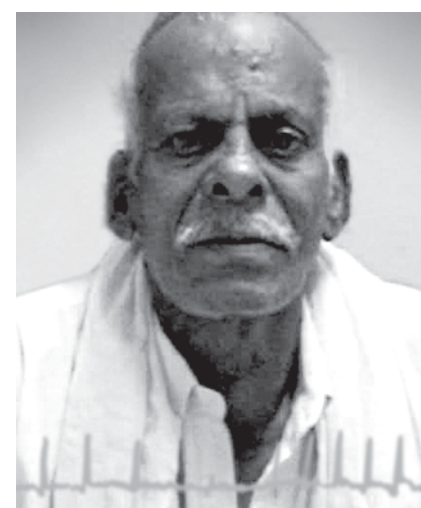
attached to the chest are connected to a recorder that stores each and every beat. It remains attached for a period of 24 hours. Silent ischemic episodes – periods of silent choking of the heart, are easily detected by this means.

Silent heart attack is like a hidden iceberg where the most dangerous portion remains out of sight. Early detection is the only way to bring this problem to the surface. This will enable your consulting physician to initiate preventive measures or timely treatment, allowing you to lead a long and healthy life.

Dr.S.Manoj
Head of Cardiology,
Specialist in Interventional
Cardiology

You’re Never Too Old

How old is too old for coronary angioplasty? If you have the will to live, it’s never too late, as this case study proves.



One day a very senior citizen appeared at my clinic. He was 95 years old - born in the days of the British Raj and a former freedom fighter. Age had not defeated the spirit of this valiant old man – but physical infirmities were beginning to surface. The reason that had brought him to our hospital was a nagging chest pain that did not respond to medication.

The patient, Mr. Ellapan, was then subjected to angiography. This revealed a single artery block for

which angioplasty was advised.

Due to his advanced age, Mr. Ellapan declined the procedure and left the hospital with a prescription for medication to control his chest pain. A year later, the sprightly old man was back in my clinic. He complained that his chest pain had been increasing despite the medication.

I scheduled another angiogram for Mr. Ellapan. This time the angiography revealed two blocks in two different arteries. Again, he was advised angioplasty. Fed up of constant pain and discomfort and a heap of medication, Mr. Ellapan was quite prepared to undergo the procedure. By now he was 96 years old.

His sons though were reluctant to allow their dad to undergo the

balloon angioplasty. Finally, upon my reassurance that the treatment didn’t entail general anaesthesia, their consent was given.

I completed the angioplasty successfully (with medicated stents) to both the blocked arteries – and he was finally relieved of chest pain.

His wife and sons were delighted to see that Mr. Ellapan had weathered the procedure successfully and could go home within 2 days.

6 months later I was alarmed to see Mr. Ellapan back in the hospital. Upon enquiry, he assured me that he himself was healthy and pain-free, and that he had come as an attendee to his-86 year old wife who was also complaining of chest pain!

Step it Up!

You can reduce the risk of heart disease by that easiest and most simplest of exercises. Walking!

Physical inactivity is one of the most common contributors to heart disease. We all know exercise can make a difference to our health, but we seem to never find the time to make the effort. Here are a few simple ways to combine walking in daily activity:

At home:

- Go out for a short walk before breakfast, after dinner or both. Start with 5-10 minutes and work up to 30 minutes.
- Do housework whenever possible.
- Walk to the corner store instead of driving.
- When walking, pick up the pace from leisurely to brisk. Choose a raised or uphill route wherever possible.
- Instead of asking someone to bring you water or a drink, go get it yourself.
- Stand up while talking over phone.



- Walk your dog if you have one.
- Park further away at the shopping mall and walk the extra distance.

At the office:

- Brainstorm project ideas with a co-worker while taking a walk.
- Stand while talking on the telephone.
- Walk down the hall to speak with someone rather than using the telephone.
- Take the stairs instead of the elevator.
- Walk, while waiting for the plane at the airport.
- Organise a walk to raise money for charity events.
- Get off the bus/auto a few stops early and walk the rest of the way to work or home.
- Walk around your building for a break during the workday or during lunch.

What to wear?

- Start with a comfortable, well-fitted walking shoe.
- Look for snug arch support and lateral stability for firm footing.
- Wear loose-fitting clothes.



How to get going?

Start with a modest goal, like 15 to 20 minutes at a leisurely pace.

Your walk should comprise of three segments. Warm-up, Exercise pace and Cool-down.

To warm up:

Walk the first 5 minutes at a reduced pace, about 50% of your maximum effort – Pause and do some stretches (focus on your calves, front of thigh, back of thigh and lower back. Hold each for 30 seconds)

Exercise pace:

After stretching, walk at an exercise pace. On an average, brisk walking for 1 mile can range, depending on your age and general condition, from 15 to 20 minutes or about 3 to 4 miles per hour.

Lighter Side

Remember:

- Never exert yourself beyond feeling as if you are doing 'moderate' work.
- Keep your shoulders and back relaxed, letting your arms swing naturally.
- Your heel should strike the ground first and you should push off with your toe.
- Try to keep an even stride and maintain a steady pace.

Cool down

For the last 5 minutes of your walk, gradually slow down. Finish with a few more stretches. Stretching helps your heart return to a normal rate.

Pick up the pace.... progressing towards improved Cardiovascular benefit.

On a weekly basis, add 5 minutes to the brisk part of your walk.

If you stop for a few weeks, don't expect to resume at the speed at which you stopped. Remember to stretch.

Important

If you are over 40 and have never before exercised, be sure to check with your doctor before beginning any exercise programme.

Walking offers endless health benefits:

Keeps your heart healthy

Physical activity lowers your blood pressure, increases the amount of good cholesterol in your blood and helps prevent heart attack. Being fit also lowers your risk of diabetes, stroke and high blood pressure.

Boosts your energy

Walking gives you a greater capacity for work and helps you deal better with daily stress.



Improves sleep

Keeps your bones healthy

Walking and other exercises that force you to work against gravity help strengthen your bones.

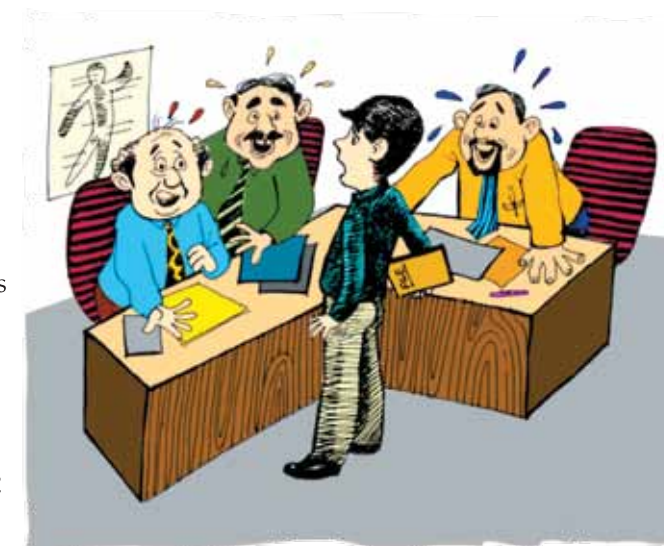
In a lighter spirit

Many years ago, while I was a student we were appearing for our physiology examinations. One by one we were called in for orals. When the first student came out every one charged towards him to find out what was being asked.

The student said, "They asked what I had this morning. I said I had 2 idlis. Idlis contain carbohydrates, they said.

So the question was - 'Tell us about carbohydrates metabolism'."

Then, the second student came out and everyone asked him what he was asked.



The student said, "They asked what I had this morning. I said I had bread and butter. Bread and butter contain fat. So the question was - 'Tell us about fat metabolism'."

Next it was my friends' turn, and every one asked him what he was asked.

My friend said, "I hadn't studied fat metabolism or carbohydrate metabolism. So when they asked me what I had this morning. I said, 'Alcohol sir!'"

"And what was the question?" we asked. (Those were prohibition days.)

"Well," he said, "All three examiners had only one

question - "Can you get us some?" Needless to say he cleared the exam!

Prof. Dr. P.V.A. Mohandas



Looking Into the Heart of the Matter

Whether it's the beginnings of a heart defect or a tumor the size of a pinhead, the new 64 Slice Lightspeed scanner can detect it in minutes.

If you're over 40, in a stressful but sedentary job, with no time for exercising, but a hearty appetite, then you could be in danger of heart disease.

We don't mean to alarm you unnecessarily but the fact is that the biggest killer in India has symptoms that can be mistaken for anything else – breathlessness, chest pain and excessive sweating. And if you have diabetes, then even these symptoms may not be evident.

How then can you get a true picture of the state of your health?

The World's Fastest And Most Advanced Scanner

The traditional methods are the EEG the Echo Cardiogram the Stress Treadmill test and the invasive cardio angiography.

Now you can bypass all of this. We have acquired the 64 Slice Cardiac CT scan. This is the world's fastest and most accurate scanner.

1 second and it will show if there is a dilated blood vessel in your brain,

5 seconds and it can rule out 3 of the most common heart defects in India, 10 seconds and your whole body can be scanned for potential illness.

Why faster is better

Imagine arriving at the hospital with a blinding headache, or numbness or gasping with chest pain – would you like to undergo a 20-minute scan or a 10-second scan?

The GE 64 Slice CT Scanner is not only faster but more comfortable for you to undergo.

A device on the scanner automatically controls radiation so you receive as little of it as possible.

Faster scanning also means better results – in just 5 heartbeats the scanner can detect pulmonary embolism, coronary blockage and aortic dissection. A dedicated cardiac workstation helps rule out cardiac disease.

Non-invasive Angiogram

In many cases the CT angiogram (scan) can replace the traditional angiogram – an invasive procedure requiring hospital admission. Most cardiac patients on anti-coagulants or with kidney problems (susceptible to reactions from dyes), will

specifically benefit. It is also useful to check the performance of stents or grafts after surgery.



Clear images of every corner of your heart from the new 64 Slice CT Scanner

Not only for Cardiac Care

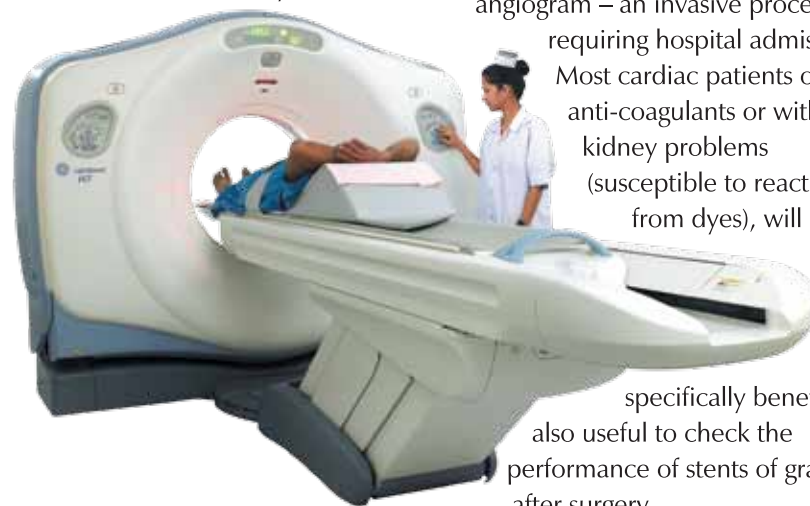
- A whole body scan helps detect peripheral diseases in diabetics.
- A neurosurgeon can trace a vessel from the heart to the brain without requiring separate angiograms for the head and neck.
- It's useful to clearly view tumours in hard-to-access places like brain stem.
- It's useful to detect and head off paralytic strokes before they happen.

Who should undergo a Coronary Angio ?

- You are diabetic
- You have high cholesterol
- You have high blood pressure.
- Lead a sedentary life
- Have frequent unexplained chest pain and left shoulder pain
- Have suspicious ECG changes
- Are a smoker
- Have family members who have suffered from heart attack
- Want to check the performance of graft/stent post surgery

Dr. Raja Mahesh

Chief Radiologist,
Department of Imaging Sciences



SALT and your HEART

Too much salt can cause high blood pressure which increases the risk of developing heart disease - says Dr. Rajiv Varghese



- Watch out for cooking sauces (especially soya sauce) as some of these are very high in salt.



Foods to avoid or limit: (which contain a high amount of sodium)

Pickles	Dry fish and meat
Baked foods	Pappads
Canned foods	Cheese



The reason why many of us consume too much salt in our daily diet is because we are not aware of all the foods that contain salts. Inadvertently we consume more salt than is good for us. For instance, are you aware that some staple foods such as bread and some cereals have added salt? Also, when shopping for groceries, watch out for foods such as chips, nuts, ketchup, pickles and pizzas that typically contain a lot of salt.

How much is too much?

Health experts recommend that adults should consume less than 6 gms of salt in a day. (6 gms equals one teaspoon of salt.)

Pass the salt

Or rather, skip the salt. Adding salt to your food while you are cooking, or at the table, may seem like a hard habit to break. If you find this

difficult, you could try adding some mixed herbs or spices to give your food more flavour. You will be surprised how quickly your taste buds adapt to diet changes.

Salt Reduction Plan

Here are some easy ways to reduce your salt intake:

- Try adding less salt to your cooking. When you get used to the taste, cut it out completely.
- Avoid adding salt to your meal at the table. Taste it first and try adding herbs if you wish.
- Watch out for salty snacks such as chips and nuts and highly salted foods such as cheese, and processed foods such as ready meals and takeaways.
- Eat plenty of fresh fruit and vegetables. Aim for five portions a day.

Processed meats such as bacon and ham

Bottled sauces such as ketchup & soya

Powdered and canned soups
MSG (Monosodium glutamate – ajinomoto)

Salted snacks such as chips, nuts and mixture.

Stay healthy!

Dr. Rajiv Varghese
Cardiologist

Diabetes attacks your Heart. See it in Time.



MIOT brings you the world's most advanced **64 Slice CT Scanner**

Call us at 22492288 today [Extn-255/6 - for appointment]