

# MARUTHUVA VIVEKAM

Doctors Advice - For a Healthier Life

MIOT Hospitals receives  
the FIEO Gold Trophy from the  
Ministry of Commerce for outstanding  
export performance in Health related and  
Social Services.

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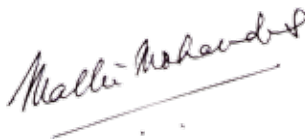
## From the Chairman's Desk

Dear friends,

Thank you for your encouraging response to the first issue of Maruthuva Vivekam. In this issue too, our medical fraternity will continue to share the benefit of their experience with you. Every article in this issue has been contributed by a specialist - giving you guidance and advice on common medical ailments and how to prevent them.

In our lead article we explain how computer navigation has completely revolutionized Joint Replacement Surgery and how you can reap the benefits. MIOT is one of the first hospitals in the Asia Pacific Region to offer this procedure. You can also read about how a simple backache may not be so simple, how you can suffer from a toothache even with perfectly maintained teeth, and why diabetics should always wear thick socks. I hope you find this issue useful. Your feedback and suggestions are always welcome.

Good luck and good health!



Mrs. Mallika Mohandas  
Chairman



# Oh My Aching Back!

"Don't take your backache lightly!" - cautions

Professor **DR. P. V. A. MOHANDAS**,  
in this first of a series of articles,  
on this common ailment.

From time to time, my friends consult me casually on what they should do about their aching back. Obviously they do not realize that back pain is not a simple topic for casual consultation.

There may be many reasons for your backache. The pain in the back may arise from diseases in the disc (the sponge between two vertebrae), diseases of the spinal cord and also

from diseases of the organs situated in front of the vertebral column, the liver, spleen, intestines, kidneys, ureters, bladder, prostate, uterus and ovaries etc. These organs may be affected by infection including tuberculosis, tumour, cancer etc.

A backache could be a warning of a deeper malaise. So take your backache seriously if the pain is chronic or increasing day by day.

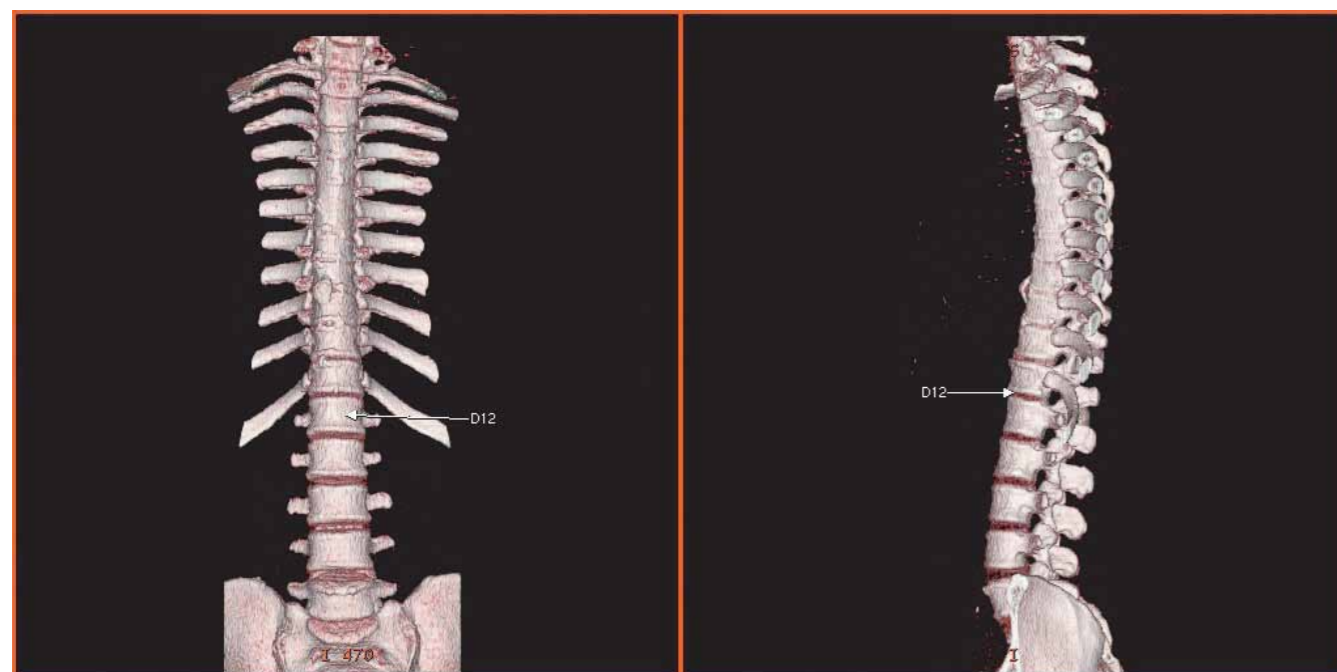
## Common Causes

The most common cause of backache in women is chronic pelvic infection in



the young and the middle aged, and osteoporosis in the elderly. The most common cause of backache in men is slipped disc in the young and the middle aged, and infection of the prostate or cancer of the prostate in the elderly.

Since each of them involves a long discussion I will take them up in subsequent issues of this newsletter - perhaps beginning with osteoporosis in the next issue.



# Computer Navigated Joint Replacement Surgery - Now In India

*Ever since Sir John Charnley innovated Total Hip Replacement 40 years ago, Joint Replacement has become an accepted procedure all over the world. An estimated 1.5 million joints are replaced every year, for painful arthritis of the hip. No other surgical procedure in the last few decades has been so very successful. The relief from pain, the correction of deformity, and the restoration of function is so complete, that it is hailed as the "Modern miracle of this era".*

## So what was the problem?

While joint replacements were successful - the problem lay in the life of the joint. An artificial joint had a life of 20 - 25 years. To make them permanent, scientists began researching material from high-density polyethylene to ceramics, titanium and steel. They also experimented with the design of the joint. All their efforts led to prolonging the life of the joint by a few years only.

Meanwhile the scientists made another discovery. Just like how computer corrected wheel balance can enhance the life of a tyre, scientists asserted that if the artificial joint could be implanted with correct anatomical alignment, and zero error, then, the longevity of the implant could be improved. This is possible only through Computer Navigated Surgery.

## Computer Navigated Surgery

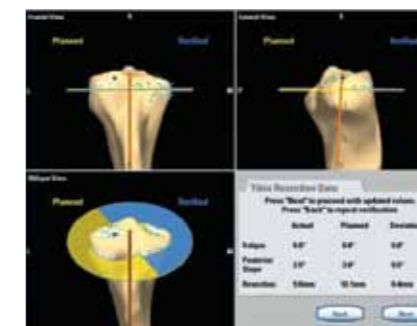
The Department of Orthopaedics at MIOT was the first to practice Computer Navigated Joint Replacement Surgery in the Asia-Pacific Region. In this type of surgery, the computer monitors every step of the

surgeon, ensuring a zero error performance.

Just as every person's fingerprint is different, every person's anatomical knee axis too is slightly different.

Through a camera attached to the computer the shape and movement of the patient's hip, knee and ankle are registered in 3-dimension (including the special areas that distinguish an individual's joint). This helps us fine-tune the surgical instruments and cutting jigs instruments on the computer to zero degree error before the bone is cut.

After making the cut on the bone special instruments measure the accuracy of the cut on the computer. When the cut is 100% perfect, the next important prospect is being able to balance the soft tissue and ligaments on the medial and lateral sides of the knee. This ensures that the knee is stable and well balanced.



Also by this, we are able to ensure that the knee has the same gap and tissue tension in flexion (bending) and extension (straightening) of the knee.

The computer shows all the important data before implanting the components of the knee - it shows the alignment (pre and post operative), flexibility, extension gap, etc. At the end of the operation the entire procedure can be stored on a CD.

## Benefits of Computer Navigated Surgery

1. Ensures the patient's total knee components will be implanted in the original anatomical axis with near zero degree error. This also minimizes component wear and increases the life span of the knee.
2. Lessens the duration of the operation.
3. Because no intramedullary rods are used to position the femoral instrument the incidence of fatal fat embolism will be less.
4. Accurately positioned knees are consistently possible.
5. With components implanted with reference to the axis of the limb, component wear will be minimized and hence the lifespan of the knee will definitely increase.
6. The chances of patient being re-operated will definitely decrease and the functional outcome will be better.

**DR. BARRY D ROZARIA**  
Senior Consultant Orthopaedic Surgeon



# Changing Faces: A Reality

*A spouse with a gummy smile that you find hard to kiss? A child with a protruding chin being harassed by her schoolmates? Relax. Maxillofacial surgery is the answer.*

Think about it. The face constitutes less than 9% of the body surface area, yet it's the key to our identity, affects our self-esteem, governs our relationships and even advances our career.

## What's in a face?

Facial appearance depends upon genetic inheritance. Beauty depends on the balanced growth and development of the facial skeleton and dentition. However, environmental factors like trauma, diseases and drugs, as well as habits like thumb sucking, nail chewing etc, affect the facial structure by creating imbalances in bone development. Aesthetic facial surgery is an exciting new specialty that offers an improvement in facial contours, through corrective surgery on the facial skeleton and soft tissues.

## DIAGNOSIS OF FACIAL DEFORMITIES

The extent of facial deformities depends on the cause:

- Excessive growth of the upper jaw will cause protruded upper teeth and a "gummy" smile due to excessive exposure of the gums and difficulty in closing lips

- Excessive growth of the lower jaw can result in a protruding chin
- Deficient growth of the lower jaw means a receding chin
- Deficient growth of the upper jaw results in a 'dish face' appearance

## Is surgery a must?

The decision to operate hinges mainly on the body image concept held by the patient. In other words this is an elective surgery where a patient decides that a transformation is vital for his or her well being, in the long run.

The surgery involves breaking the jaws in a preplanned manner (after studying photos, dental models and a special skull X-ray) and then repositioning them using wires and plates for better aesthetic and functional results.

The operation may take anywhere between 1 to 5 hours and is invariably performed under general anesthesia, with procedures being done through the mouth itself, so that no scars are visible on the exterior. Recovery takes a few days and patients are only allowed a soft, high calorie diet and advised to avoid contact sports for a month.

Complications, if any are usually loss of blood requiring transfusions, anesthetic side effects like dry cough, nausea and vomiting, and altered sensations over the lips due to tissue swelling after surgery. All these are minor and self-limiting.

## End Result

Today a handsome or pretty face is worth a fortune. Facial profiles can be engineered to enhance symmetry, achieve dimples, high cheekbones or a cleft chin. More importantly, it can remove the psychological trauma of a deformity and improve function (for instance, by realigning teeth for better mastication). Good teamwork between the oral and maxillofacial surgeons, the orthodontist, radiologist and the anesthesiologist are a must to ensure a good outcome.

A word of caution. Don't have unrealistic expectations of attaining "film star" looks through aesthetic surgery. Remember a surgeon can only modify you not make you!

DR. PAUL V. JOSEPH  
Oral & Maxillofacial Surgeon

Before Surgery



After Surgery



# ACNE - No More A Nightmare

*Is fighting acne a losing battle? "Far from it", says our Dermatologist Dr. Irene Williams, who explodes a few myths and takes you through the latest treatments.*

Acne Vulgaris, commonly known as "zits" or "pimples" are a frequent and distressing problem in the adolescent age group.

Acne occurs due to inflammation of the oil glands present under the skin, which get activated by hormones, at the onset of puberty. Genes also play a role in determining how prone a person is to acne. Our environment (heat, dust and humidity) is another contributing factor.

## Myths and Facts

**Myth:** Only adolescents suffer from acne

**Fact:** Though the common age group is between 14-19 years, recently there has been an increase in adult acne (over 25 age-group).

**Myth:** Acne and excess facial hair are not connected

**Fact:** Some types of moderate to severe acne are associated with excess hair growth in females. These patients may also have irregular or scanty monthly periods. This is due to an imbalance in their hormones, which must be checked before starting therapy.

**Myth:** Oily food and chocolates stimulate acne breakouts

**Fact:** There is no clear-cut evidence that food has any role to play in acne formation. However avoiding starchy food (rice, potato) and increasing consumption of veggies, fruits and fish definitely helps control acne.

**Myth:** Repeated washing of face with soap and water helps control acne

**Fact:** On the contrary, repeated washing actually aggravates the condition. In any case only mild, non-medicated soaps, which are not heavily perfumed, should be used.

**Myth:** Squeezing pimples improves appearance

**Fact:** Never pick or touch a pimple. It can damage the oil gland and even spread the infection. Squeezing

leaves behind ugly marks and scars.

**Myth:** There is no treatment for acne, pigmentation and scars

**Fact:** There are numerous options available for the entire spectrum of acne and its complications. Active infected acne might need specific antibiotics and creams. In some resistant and severe acne cases we use Tretinoin (a synthetic Vitamin A product).

For scars and pigmentation, apart from the usual chemical peels, we can achieve excellent results through procedures like microdermabrasion and lasers. These not only tackle scars but also eliminate wrinkles, fine lines, stretch marks and open pores, while being gentle to the skin.

If neglected, acne can even lead to anxiety, depression and low self esteem. With the array of medication and new treatments available there is no reason for any body to suffer. Early and adequate treatment is the answer to a glowing complexion.

DR. IRENE WILLIAMS  
Consultant Dermatologist



## LAUGHTER IS THE BEST MEDICINE

A very famous Joint Replacement Surgeon operated on the Bishop of Canterbury - Religious head of the Protestants in England. The Bishop, while leaving the hospital expressed his gratitude to the Surgeon and wanted to know how he could repay him for what has been done for him. The surgeon just smiled and waved him off. A week later the surgeon's clinic, received a parcel containing a case of the best Champagne from the Bishop.

Some time later, the surgeon operated on the Bishop of Westminster - Religious leader of the Catholics. After a successful surgery, the Bishop went home and soon there arrived at the surgeon's clinic, a case of the finest Benedictine Liqueur. .

A few months later, the surgeon operated on the Chief Rabbi of London. - Head of the Jewish religion. This time too the surgeon waived payment. A week later when the surgeon went to his clinic, he found a queue of Rabbi waiting to consult him.



# Fourth Time Lucky: A Rare Heart Surgery at MIOT

*It certainly was a close call for 30 year old Abdul Kareem. Kareem who runs a telephone booth at Kozhikode, Kerala was admitted on January 3, with a complaint of breathlessness. He had undergone three surgeries earlier for a condition called coarctation of aorta - a rare connective tissue disorder.*

**Rare Disorder:** In this condition, the largest artery of the body and a major lifeline, the aorta had developed a segmental narrowing imposing a strain on the heart. By the time he reached adolescence, Abdul Kareem was a physical wreck running short of breath at the mildest of activities and forced to stay indoors. The narrowed portion of the blood vessel triggered frequent episodes of cardiac failure. There was little choice except to attempt a surgical correction. The young boy was operated in 1984 at a local hospital. Just three years later the symptoms recurred and the graft had to be replaced. In 1991 he developed a graft give away and ballooning at the operated site and began to have bouts of cough, bringing up phlegm tinged with blood. He was operated

for a third time when a fresh graft was inserted to connect the ascending aorta to the abdominal portion.

**A Virtual Time Bomb:** For 13 years Abdul Kareem remained in relatively good health, got married and was blessed with a son. But at the beginning of this year he again began to experience breathlessness and was unable to keep up with his son's play. He decided to consult Dr. V.V. Bashi MS. MCH the Chief Cardiothoracic Surgeon at MIOT who had performed his previous surgery at Vellore. Investigations revealed that Kareem had unfortunately developed ballooning of the ascending and arch portion of the aorta associated with a serious leak of the aortic valve. He was a virtual time bomb with a real danger



of the ballooned portion bursting and claiming his life at any moment!

**"Medical Miracle":** Dr. Bashi told Kareem and his family that performing the fourth surgery could be quite risky, yet the family voted to go ahead with it. The surgeons prepared almost a week for the surgery. "Opening the chest was difficult as even a minor error while using the saw could cut into the aneurysm and cause instant death" said Dr Bashi. Kareem was connected to a heart lung- machine with two tubes attached to the leg artery and veins. The body was cooled to 16 degrees centigrade until the heart stopped beating. The chest was then opened in a deliberate and unhurried manner and a very complex and complicated surgical procedure was done where the ascending and proximal arch of the aorta and the leaky aortic valve were replaced in one sitting. The vital coronary arteries had to be severed and reattached to the new graft.

The surgery that lasted for nearly seven hours, was a success and the patient made an uneventful and total recovery over the next ten days. "I can't believe I'm alive... it's a miracle! Surely God and the doctors have helped me," says a grateful Kareem. In fact fourth-time surgery with such complications, has not been reported anywhere in the world. Kudos to Dr Bashi and his team for pulling off this "medical miracle."

From the Case Files of  
DR. V.V. BASHI  
Cardiothoracic Surgeon

# Diabetic Foot Care - For today, tomorrow and thereafter



If you're a diabetic you had better take extra special care of your feet. Even if you nick your feet while cutting your toe nails, it could turn into a leg ulcer that could result in your losing your entire foot!

## How does diabetes cause foot disease?

Blood supply to the foot is impaired due to arteriosclerosis. Diabetics also suffer from nerve damage resulting in loss of sensation in the feet. Because of this, even a small cut, thorn prick, or an improperly fitting shoe may cause entry of bacteria. You will not even notice the injury as sensation in the foot may be impaired and the wound may not heal as blood supply is insufficient.

## How to screen patients with high-risk diabetes

Self examination - All individuals with diabetes should examine themselves daily for foot problems

Examination by the doctor or by trained personnel whenever they visit the hospital.

Annual foot examination by latest machines

## Diabetic Foot Care Tips

Blood sugar, blood pressure and cholesterol should be brought under control before you start the actual foot care.

- Check your feet everyday for cuts, sores, bumps or red spots. Use a mirror or ask a family member to help, if you have trouble seeing the soles of your feet
- Wash your feet in Luke warm everyday and dry with a soft towel. After washing your feet apply a lotion before putting on your socks and shoes. Wear thick soft socks
- File your toe nails straight across with an emery paper board
- Check your shoes before you put them on to be sure they have no sharp objects in them
- Don't try to cut calluses or corns with a razor blade or knife
- Wear socks if your feet get cold at night
- Have your doctor check your feet, every visit

## A diabetic foot check up should include:

- Detailed patient evaluation
- Examination of deep tendon jerks
- Vibratory detection by sensimeter - to assess for vibration sense
- Heat cold pressure - Monitor
- Peripheral Doppler studies to study blood flow to foot
- Photoplethysmography - to study the blood flow to toes
- Foot scan to know the foot biomechanics

DR MUBARAK RAJA  
Consultant Diabetologist



# Are you sure your toothache is just a toothache?

*When your tooth aches, what is your reaction? "Oh, I have a cavity, I need to see the dentist" - and you schedule an appointment. Now imagine this scenario:*



On a busy day, a leading young dentist looks into the mouth of a pretty patient with the idea of extracting the culprit and relieving her of her pain. But to his surprise he finds beautifully maintained 32 teeth. Puzzled, he puts her on painkillers. Within 3 days she is back again with a severe bout of pain. The perplexed dentist changes the prescription, again and again, to no effect.

## A Likely Scenario

Finally, the patient confronts the dentist. "You keep giving me these prescriptions but they are of no use," she shouts. "My pain strikes me like lightning, lasts few seconds and is so severe it brings tears to my eyes", she says. "What's more, it strikes the right side of my face, and when I attempt to brush my teeth, it gets even worse," she shudders. Her 6-year-old daughter chips in - "Doctor, my mummy can't eat ice cream any more, which means none of us can! Please do something". Her husband says, "You know, my wife was a Beauty Queen with a



wonderful smile but now she stopped smiling. She finds it too painful!" At this point inspiration

strikes the dentist - he immediately writes a prescription for the new wonder drug Tab. Carbamazepine and assures the patient that she will be smiling in a couple of weeks. Two weeks later the patient is back. This time with a dazzling smile. The doctor reveals the accurate diagnosis he made - TRIGEMINAL NEURALGIA. He prescribes the same drug and asks her to take it continuously for a year with a periodic review once in a month.

## Visit a Neurosurgeon???

A year later the smile is gone and our young dentist is once again facing the wrath of the patient. Knowing that the same medication would no longer be effective, the dentist refers her to his friend a Neurosurgeon. "See a Neurosurgeon for toothache?", the patient is rightly puzzled. The dentist explains, "Your pain is not due to a dental cause. It is due to the irritation of the nerve known as Trigeminal nerve supplying the face and teeth. When this nerve is affected in the brain you will experience shooting pain that lasts for few seconds, and comes on and off. The pain is triggered by ice creams, cool drinks, chill weather or

even by brushing the teeth or eating a particular food. This pain will not be relieved by regular painkillers and needs specific medication".

The danger is, that many dentists attribute the symptoms to a dental cause and begin extracting teeth. Sometimes a whole row of teeth may get extracted before the dentist diagnoses

Trigeminal Neuralgia!

## Putting the Smile Back

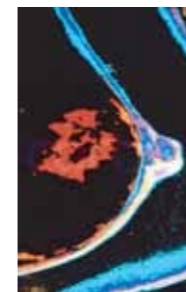
Getting back to our pretty patient - she is now in the consulting room of Neurosurgeon who asks for a CT scan of the brain. This is necessary to exclude that tumors or blood vessel malformations are compressing the Trigeminal nerve. She returns with CT scan of her brain that is normal. He begins to discuss with her the various options of pain relief for this condition.

The Neurosurgeon also points out that irrespective of the procedure undergone, there would be a 10% chance of recurrence at the end of 5-10 years, which could require further treatment. He also adds that the procedures have a 95-98% success rate with 1-2% chance of complications that could be life threatening.

The patient decides to undergo treatment and the Neurosurgeon opts for Retrogasserian Ganglion Glycerol injection a minimally invasive, low risk procedure with good long-term results. 48 hours after the procedure her beautiful smile is back and she looks fit for a beauty pageant again!

# Am I Prone to Breast Cancer?

*For all you women out there, we have news for you.  
What you don't know CAN hurt you!*



Did you know for instance, that Breast Cancer is a leading cause of cancer deaths in women. The important fact is - breast cancer can be prevented. Early detection through a simple self examination and an awareness of the risk factors associated with it, are the key to successful treatment.

## Who is at risk?

- Older women
- Those with a genetic and family history (If your mother is a breast cancer patient, you are likely to develop cancer even at an earlier age)
- If you are on certain birth control pills (High-dose Progestrone Pills)

- If you are chubby and attained menopause with high cholesterol
- If you are a regular smoker

## Risk factors are reduced if:

- You have children
- You have breast fed your children
- Got married early and had your first child at the earliest
- Reached puberty at a later age

Early diagnosis of cancer of the breast gives you a chance for a complete cure. Thanks to new modalities in cancer management we can avoid mutilating surgery and save the breast. With early detection and the right treatment you can lead a completely normal life.

DR RAJESH DANIEL  
Consultant Surgeon

## Five Steps in Early Recognition of Breast Cancer

1. Know what is normal for you.
2. Know any changes
3. Look and feel regularly ( for lumps, bumps, cracks in the nipples, abnormal discharge)
4. Report any changes to your doctor
5. Undergo routine breast screening if you are 50 or over (Mammography)

**SALTUMAX** <sup>iv</sup>/<sub>im</sub>  
Cefoperazone / Sulbactam (1:1) 1g & 2g vials



*When there is no time to*  
**Think!**



**MOREPEN**  
The Joy Of Growing Together



# Heart to Heart

INTERVIEW WITH **DR. V.V. BASHI** Chief Cardiothoracic surgeon

**Q. What do you mean by heart attack?**

Technically, a heart attack occurs when the supply of nutrient-rich blood to the heart muscle is reduced or stopped. If the blood supply is shut down for a long time, muscle cells die from lack of oxygen. If damage is extensive, the victim will also die. Often, only a small part of the heart muscle is deprived of oxygen so the victim can recover.

**Q. How can one diagnose it?**

Some heart attacks are sudden and intense. But most heart attacks start slowly, with mild pain or discomfort. Often people affected aren't sure what's wrong and wait too long before getting help. These are the signs that indicate a heart attack.

(a) Chest discomfort - most heart attacks involve discomfort in the center of the chest that lasts more than a few minutes or that goes away and come back. It can feel like an uncomfortable pressure, squeezing, fullness or pain.

(b) Discomfort in other areas of the upper body- symptoms can include pain or discomfort in one or both arms, the back, neck, jaw or stomach.

(c) Shortness of breath may occur with or without chest discomfort.

(d) Other signs- excessive sweating, nausea or breathlessness.

**Q. Are there ways to melt the clots in the coronary arteries?**

Any clot in a coronary artery can be melted by injecting a certain blood-thinning drug into the blood circulation. However, for it to be effective it has to be given within the first hour of the heart attack.

**Q. Is cholesterol bad?**

Not all cholesterol is bad. There are good and bad cholesterol. Cholesterol is carried through the bloodstream by different types of fat carrying proteins called lipoproteins.

1) High density lipoproteins (HDL) are the "good" cholesterol that carry cholesterol away from the blood vessels.

2) Low density lipoprotein (LDL) are the "bad" cholesterol that carry cholesterol to the arteries. Cholesterol effect: (a) Excessive levels cause build-up of plaque, restricting flow of blood

(arteriosclerosis) (b) Partial blockage limits the blood and oxygen supply to the heart, resulting in chest pain called angina. (c) Complete blockage causes heart attack, the unsupplied part is destroyed.

**Q. How can one control cholesterol to prevent heart attacks?**

Cholesterol has to be checked regularly to keep the bad cholesterol under normal limit. Diet control (reduced intake of fat containing food and taking more fresh fruits and vegetables) and regular physical exercises (walking) can keep the blood cholesterol well under control in normal individuals without additional risk factors. Cholesterol lowering medicines are also available.

**Q. How can one know the status of the coronary arteries?**

Coronary arteries can be visualized by a procedure called Coronary Angiogram. In this procedure a radio opaque dye is injected into the coronary arteries. A camera records the procedure as the dye circulates through the coronary arteries. Any block or narrowing of the coronary arteries can be detected.

**Q. What is meant by bypass surgery?**

Bypass surgery is a surgical procedure where deficiency in the blood supply can be corrected by creating an alternate blood supply using arterial or venous grafts taken from the patient's own body. When this is done in the arteries supplying the heart, it is called coronary artery bypass grafting surgery.

**Q. What is the difference in the outcome between venous grafts taken from the legs and arterial grafts taken from the hands?**

Though cholesterol deposition can occur in both venous grafts and arterial grafts used for bypassing, studies have shown that arterial grafts stays patent more than the venous grafts.

**Q. What is the risk to life during bypass surgery?**

With advanced surgical techniques and intensive post-operative monitoring, coronary artery bypass grafting is a relatively safe procedure with an overall mortality rate of less than 1%.



**Q. How much blood is lost during bypass surgery?**

With the advent of beating heart coronary artery bypass grafting, the blood loss during the surgery is minimal and seldom requires blood transfusion.

**Q. What is the duration of the hospital stay for bypass surgery?**

On an average patients undergoing bypass surgery may have to stay in the hospital for about ten days.

**Q. What are the diet restrictions after the bypass surgery?**

Diabetic patients have to be on strict diabetic diet. Generally, after bypass surgery patients should avoid fat containing food items. Avoid bakery items except bread. No red meat, Egg yellow, Prawns, Lobsters, Crabs. Use less oil for cooking. Any oil should be used in moderate quantity. Low salt diet/ low fat diet. No papads.

**Q. What about family life after bypass surgery?**

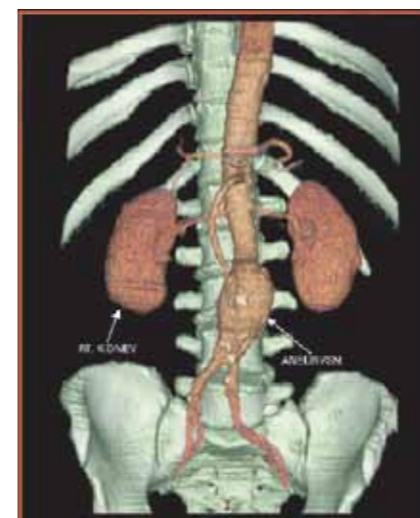
Patients who have undergone bypass surgery can resume normal sex life three months after surgery.



## Discover The Benefits Of CT - Angiography

Computerized Tomography (CT) Angiography is the latest tool in the field of medicine. Taking a CT Angiogram is as simple as taking an X-Ray. This non-invasive procedure enables us to visualize the blood vessels and blood supply to various parts of the body in the 3D Angio-format.

Conventional Angiography involves a major arterial puncture, injecting radio opaque dye and taking x-rays of the required vessels. In CT Angio the radio opaque dye is injected like an ordinary injection and the arterial images of the patients are processed through computer software to get a 3D Angio format.



CT - Angio showing normal kidney vessels and ballooning of Aorta

### Applications of CT Angiography

**Cerebral Angiography is useful in stroke patients to know which vessel is blocked.**

In young people, the most common cause of headache and stroke is the ballooning of brain arteries (aneurysm). These aneurysms are

dangerous as they can rupture at any time. Cerebral Angiography is useful in detecting these aneurysms.

Pulmonary Angiogram is advised in patients who have undergone major surgeries, to detect blockades in pulmonary arteries (lung arteries). This blockade can occur during prolonged immobilization after surgery.

**An Abdominal CT Angiogram has the following definite applications:**

- Renal Angiograms help detect narrowing of renal arteries in young, uncontrolled and hypertensive patients
- For renal transplantation, the status of the donor renal artery and blood supply to the donor kidney can be assessed
- In certain cancers of the kidney or liver the new blood growth due to cancer and its supply to cancer

tissues can be assessed before surgery

- Causes of the decreased blood supply to small bowel/large bowel can be identified

### Is CT-Angiography better?

CT Angio is a comfortable procedure that doesn't require puncture of major thigh artery

There's no risk of bleeding

A simple test - it can be done as an outpatient procedure

It is a sectional imaging modality - so disease process outside the blood vessel can be seen

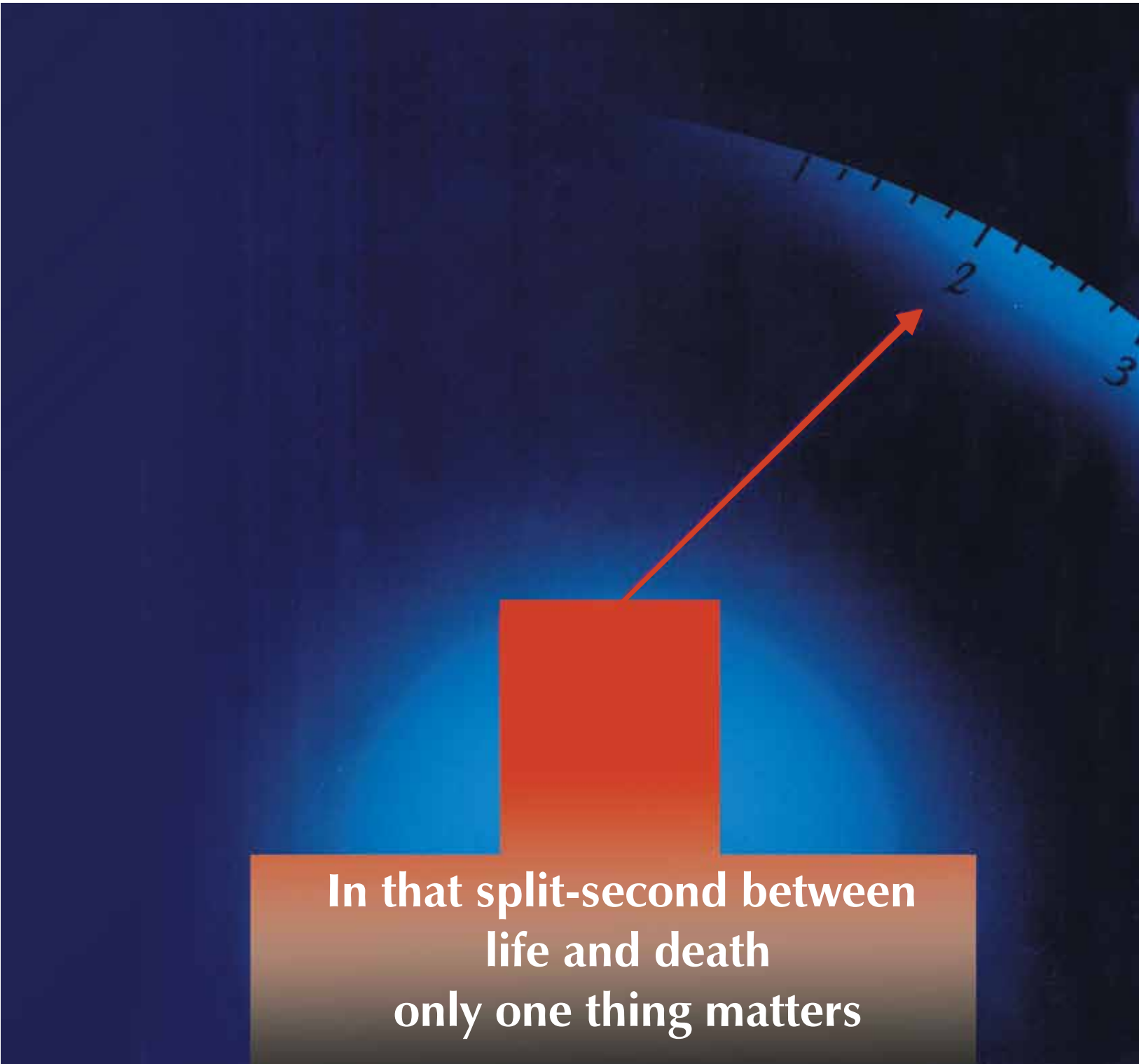
The 3D view of the reformatted vessels helps surgeons to plan their surgeries

**DR. RAJA MAGESH**  
Consultant Radiologists

### Did You Know?

#### FACTS ABOUT TUBERCULOSIS (T.B) AND AIDS

- Tuberculosis is the leading cause of death among AIDS patients in India.
- Tuberculosis accounts for more than 40% of AIDS death in Africa and Asia.
- Tuberculosis and AIDS are a deadly duo - each speeds up the progress of the other.
- More than one third of Tuberculosis patient is five years was due to AIDS.
- In India more than 2 million people are jointly infected with AIDS and TUBERCULOSIS
- Women in the age group (18-40 year) with AIDS are at greater risk for TUBERCULOSIS.



**In that split-second between  
life and death  
only one thing matters**

MIOT Accident Rescue Services (MARS) has been established by MIOT Hospitals to provide rescue services to accident victims. Our ambulances have already rescued over 500 victims in the last few years and rushed them to the nearest hospitals.

**MARS Accident Safety Policy** provides - free ambulance services, free treatment and compensation benefits for fatalities - all for a membership fee that could be as low as Rs 160\* per annum!

Next time you see a road accident or need help, call MARS.

**MARS Ambulance Services : 10 57 10**

**MARS**

**MIOT ACCIDENT RESCUE SERVICES**

4/112, Mount Poonamallee Road,  
Manappakkam, Chennai - 600 089.  
e-mail : [miot@vsnl.com](mailto:miot@vsnl.com)

**Helpline/Policies:**

\*K.Adhikari-98410 99321/98412 66701

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HOSPITALS**   
PUTTING PATIENTS FIRST

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