## 

Price : ₹ 5/-

Honorary Editor : Dr. Satya Gupta



## From the Desk of Hon. Editor:

Artery carries oxygenated blood from lungs via left side of the heart to the rest of the body while veins brings back deoxygenated blood back to the lungs via right side of the heart. Arterial problem usually become life threatening and needed immediate attention; venous diseases are critical some time but may not be life threatening. Chronicity of venous problem may leads to chronic venous insufficiency and edema of limbs, ulceration, claudication, pain, discoloration and varicose veins.

Lack of structured training program dedicated to veins is the main reason for underdiagnosis of veins related problem. Any venous problem and treatment needs close interaction between interventionist, vascular surgeon and radiologist. At CIMS we have a developed team of highly skilled interventionist, vascular surgeon and radiologist who are ready to take care of any problem related to vein.

- Dr. Satya Gupta

**Diagnosis & Treatments of Venous Diseases** 

## Types of venous diseases

## A. Chronic venous insufficiency (CVI) and venous stasis ulcers

 Disorder involving stasis of blood in lower extremities as result of

obstruction & reflux of venous valves

 Long standing stasis of venous blood leads to poor circulation of limbs resulting into chronic venous ulcers.



## **Treatment**

- Compression Stockings
- Skin Care
- Sclerotherapy and endovenous thermalablation
- Ligation & Stripping
- Micro incision / ambulatory phlebectomy

## Prevention

 Avoid long periods of standing or sitting: If you must take a long trip and will be sitting for along time, flex and extend your legs, feet, and ankles about 10 times every 30 minutes to keep the blood flowing in the leg veins. If you need to stand for long periods of time, take frequent breaks to sit down and elevate your feet.

- Exercise Regularly : Walking is especially beneficial.
- Lose weight if you are overweight.
- Elevate your legs while sitting and lying down, with your legs elevated above the level of your heart.
- Wear compression stockings.
- Take antibiotics as needed to treat skin infections.
- Practice good skin hygiene.

## **B. Varicose Veins**

- 1. Irregular, tortuous veins with incompetent valves
- 2. May develop anywhere in body, but most develop in lower extremities
- Vein in legs most often affected: Long Saphenous
- Occurs in 1 out of 5 people; more common females > 35

Siteng. If you must take a long tip and									
Cardiologists				Cardiothoracic & Vascular Surgeons		Cardiac Anaesthetists			
Dr. Vineet Sankhla	(M) +91-99250 45780 (M) +91-99250 15056	Dr. Urmil Shah	(M) +91-98240 22107 (M) +91-98250 66939	Dr. Dhaval Naik Dr. Manan Desai	(M) +91-90991 11133 (M) +91-96385 96669	Dr. Chintan Sheth	(M) +91-95863 75818 (M) +91-91732 04454		
Dr. Tejas V. Patel	(M) +91-98240 99848 (M) +91-89403 05130	Dr. Anish Chandarana	· · /	Dr. Dhiren Shah Pediatric & S	n Shah (M) +91-98255 75933 ric & Structural Heart Surgeons	Dr. Niren Bhavsar (M) +91-98795 71917 Cardiac Electrophysiologist			
	(M) +91-98240 61266 (M) +91-98250 26999	Dr. Ajay Naik	(M) +91-98250 82666	Dr. Shaunak Shah		.,	(M) +91-98250 82666 (M) +91-99250 15056		
Congenital & Structural Heart Disease Specialist				Thoracoscopic Surgeon		3	and Pediatric Intensivist		
Dr. Kashyap Sheth	(M) +91-99246 12288 Dr. Divyesh Sadadiwala	5	(M) +91-98240 22107 980	Dr. Pranav Modi	(M) +91-99240 84700	,	(M) +91-90999 87400 (M) +91-99981 49794		





 Can be due to severe damage or trauma to saphenous vein or effects of gravity produced by long periods of standing

#### **Treatment & Prevention**

- Self care (exercise, losing weight, leg elevation, avoid long standing or sitting)
- Compression stockings
- Sclerotherapy
- Catheter assisted radiofrequency or laser energy treatment
- High ligation and vein stripping
- Endoscopy vein surgery

## C. Deep Vein Thrombosis (DVT)

- Most likely to occur in deep veins of the calf (80%)
- 25% of thrombi that occur in calf will extend to the popliteal & femoral veins
- 3. PE may be the first sign of DVT
- Deep vein thrombosis (DVT) occurs when a blood clot forms in a vein deep inside a muscle. It usually happens in legs, but can also develop in arms, chest, or other areas of body.

The clot can cause severe organ damage and even death within hours if it migrates to other vital organs of body.



#### **Treatment**

- Local care of limb & skin
- Anti coagulant therapy
- Systemic thrombolysis
- Catheter directed thrombolysis (CDT)

## D. Venous thromboembolic diseases (Acute pulmonary embolism, CTEPD)

- Some times thrombus from the lower limb may migrate to pulmonary circulation and can reach upto pulmonary artery called pulmonary embolism.
- Symptoms will depend on the size of the thrombus and the extent of pulmonary circulation involved. Pulmonary embolism is a serious diagnosis with high mortality rate.

#### Volume-7 | Issue-76 | March, 2016

#### <u>Treatment</u>

- Thrombolysis
- Thrombosuction
- Thrombo-fragmentation
- Surgery

## Presentation of venous

## disorders

- Lower leg edema
- Itching
- Brown pigmentation/ cyanosis of skin of lower leg / foot
- Fibrosis / hardness of subcutaneous tissues
- Stasis ulcers over ankle, most often medial



## Risk factors for venous disorder

- Major surgery on a hip, knee, leg, calf, abdomen, or chest
- Sitting or inactivity for a long time
- Long plane flights or long car trips
- Over weight (Obesity)



ofrequency or Anticoa Systemic





- Current use of birth control pills or patches, hormone replacement therapy
- Smoking
- An injury that reduces blood flow to part of body, such as a broken hip or leg
- Cancer- even during treatment
- A previous history of deep vein thrombosis or pulmonary embolism
- An inherited condition that increases blood clotting
- Paralysis from a spinal cord injury
- Pregnancy or having recently given birth, especially by C-section
- Varicose veins, which are swollen, twisted and painful
- A history of heart attack, stroke, or congestive heart failure

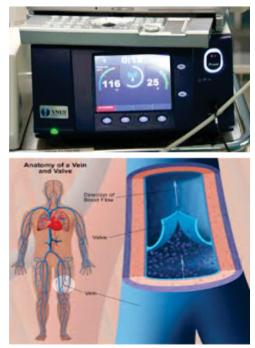
## What if one does not get treatment for veins problem

The most unfortunate long-term sequelae of DVT and other vein relate problem is post thrombotic syndrome (PTS), which presents with chronic venous insufficiency and edema, ulceration, claudication, pain, discoloration, and varicose veins. These symptoms can be severe, sometimes necessitating amputation. PTS occur in more than 10% of all patients with DVT at 1 year with the incidence increasing over time.



## **Recent Advances**

Just like great advancement in arterial interventions, there are many new techniques which have emerged to treat various complicated venous problem effectively. At CIMS hospital, we have



latest equipment and technologies to treat venous related problems.

#### **Catheter-Directed Thrombolysis**

Catheter-directed thrombolysis (CDT) has become a pivotal adjunctive therapy in the management of both acute and chronic thromboembolic venous disease. Direct infusion of the thrombolytic agent via specially designed, fenestrated catheters results in its effective delivery and leads to high local levels of drug within the thrombosed segment, thus increasing the likelihood of clot resolution and restoring vessel patency. This therapy is most likely to be successful when thrombus is acute (<14 days old) and much less effective when the clot is chronic (>4 weeks old). Such accelerated pharmacological thrombolysis may be performed even with a reduced dose of lytic agent associated with a lower overall duration of infusion. Various lytic agents can be chosen based on their individual biological half life, fibrin affinity and specificity, time to clot lysis, and respective dosing. These include alteplase, tenecteplase, reteplase, streptokinase, and urokinase. Infusion catheters typically consist of multiple fenestrated catheters with an occluding wire that allows inspissation of the lytic agent directly into the clot, over a period of time, ranging from 4 to 48 hours.

There are studies indicate that CDT for DVT achieves more rapid lysis, reduces



the incidence of long-term sequelae of DVT, improves quality of life, preserves valvular competence and more completely restores vessel patency as compared with standard anticoagulation or systemic thrombolytic therapy

## Percutaneous Mechanical Thrombectomy

Percutaneous mechanical thrombectomy (PMT) has evolved concurrently with CDT in the management of complex subsets of veno-occlusive disease. The attraction of this modality centers on its ability to fragment, ablate, or extract thrombus to expedite lysis. Usually, complete thrombus removal requires the combined use of both CDT and PMT, but the advantages offered by PMT in the immediate treatment of an acutely ischemic limb, such as when faced with phlegmasia cerulea dolens, trump those of CDT, especially when rapid restoration of flow is required.

Thrombectomy devices generally work by simple aspiration, microfragmentation, and thromboaspiration (Venturi effect). Several of these catheters have the ability to coadminister with thrombolytic agents to facilitate clot extraction.

## How team work helps to treat vein problems

To understand and treat veins diseases, one need to get opinion and inputs both from the interventionalist and vascular surgeon. Team work always helps to treat any types of vein disease in proper manner.

We have a dedicated interventionalist and vascular surgeon with special training and interest to treat veins related problem. Over the years, we have learnt and gained experience to treat vein diseases as a team.

CIMS Learning Center								
Management of Drug Resistant Tuberculosis-Certificate Course								
Course Directors: Dr. Surbhi Madan / Dr. Bhavini ShahDate: April 10, 2016 (Sunday)Venue : CIMS Auditorium								
<ul> <li>Program Overview: :</li> <li>This course is designed for physicians who are involved in the management of patients with tuberculosis. Due to emergence of drug resistant tuberculosis, the approach towards treatment has changed and is continuously evolving. It is important to have updated knowledge about the new diagnostic strategies and treatment approaches for optimal management. The aim of this course is to discuss the same with the help of clinical cases.</li> <li>Program Highlights: <ul> <li>Newer diagnostics: Emphasis on molecular tests</li> <li>Importance of culture and DST (Drug susceptibility testing)</li> <li>Define various categories of drug resistant TB</li> <li>Treatment of drug resistant TB- Program based or individualized?</li> <li>Important adverse effects of second line drugs</li> <li>Immune reconstitution in tuberculosis: Clinical relevance</li> <li>Role of surgery in treatment</li> <li>Newer drugs</li> <li>Interactions amongst antituberculous drugs</li> </ul> </li> </ul>								
<b>Registration Fees</b> : ₹ 1,000/- (Up to one month before course date)	Visit							
Registration Fees : ₹ 1,500/- (Within 15 days before course date)	www.cims.me/clc for online registration							
Spot Registration Fees : ₹ 2,000/-	CLC application available							
<ul> <li>Certificate of attendance will be given at the end of the course REGISTRATION FEES REFUNDABLE AFTER ATTENDANCE</li> <li>For more details about course detail contact on +91-90990 66527, +91-90990 66528, +91-94268 80247</li> <li>Windows Phone</li> </ul>								
CINS Hospital : Regd Office: Plot No.67/1, Opp. Panchamrut Bunglows, Nr. Shukan Mall, <u>Care Institute of Medical Science</u> World-class practices. Trusted by doctors. Off Science City Road, Sola, Ahmedabad - 380060. Ph. : +91-79-2771 2771-75 (5 lines)								



## Volume-7 | Issue-76 | March, 2016

# Healthy Heart



## One of the only centre in India to perform all possible percutaneous cardiac interventions

## Only center certified in India as "ACC Center of Excellence"



Balloon mitral /

valvuloplasty. A

balloon. Non-

aortic / pulmonary

procedure to dilate

abnormal valve bv

surgical closure of

para-valve leaks

Structural Interventions &

Adult Congenital Intervention

TEVAR Thoracic Endovascular

Aneurysm Repair A non surgical treatment for the abnormal

bulge of the arterial wall / aortic dissection

**Complex Congenital** 

International Centers of Excellence

#### Transcatheter Aortic Valve Replacement TAVR (TAVI)

A minimally invasive surgical procedure to repair the valve without removing the old, damaged valve



## Rotablation

Rotablation uses a tiny drill, powered by compressed air, to remove calcified deposits in the arteries. Since 1990 CIMS Cardiology has

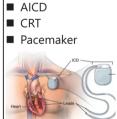


one of the highest experiences in using Rotablator in hundreds of case

#### Electrophysiology

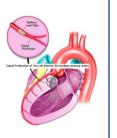
Devices

Carto-3 System An advanced 3dimentional mapping & imaging technology for accurate visualization of multiple catheters in a patient's heart and pinpointing the exact location of arrhythmogenic focus



## Percutaneous Transluminal Septal Myocardial Ablation (PTSMA)

A minimally invasive procedure (injecting absolute alcohol into the septal branch )to reduce the overgrowth of heart muscle



## **Renal Denervation**

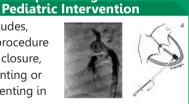
Renal denervation system uses a technique called Renal Denervation (RDN) to selectively calm hyperactive renal nerves. This causes a reduction in the kidneys' production of hormones that raises blood pressure and protects the heart. kidneys and blood vessels from further damage.

#### Atrial Septal Defect (ASD), Ventricular Septal Defect (VSD) & Patent Ductus Arteriosus (PDA)

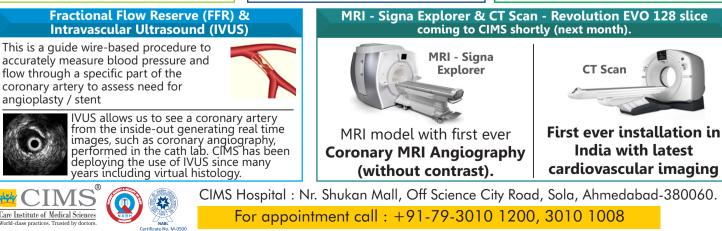
A procedure wherein an umbrella device is inserted in to the hole in the septum, or muscular walls of the upper chambers (ASD) & lower chambers (VSD) of the heart to close it permanently. A procedure to control the extra flow of blood from the main artery of the body to the artery of the lungs







neonates. They are effective options to surgery in small neonates / infants.



Ambulance & Emergency : +91-98244 50000, 97234 50000, 90990 11234 24 x 7 Medical Helpline : +91-7069000000



Care Institute of Medical Sciences

angioplasty / stent

## AS A TEACHER HE SHAPED LIVES. WE RESHAPED HIS HEART.



#dildilkikahani
Name: Mr. Sayali Isoev
Age: 68 years
Location: Dushanbe, Tajikistan

- Pioneers of SVR procedure in Western India
- Specialists in Paediatric, Geriatric, Weak Heart and Grown Up Congenital Heart Surgeries
- Team of world-renowned Cardiologists and Surgeons

Mr. Isoev, a teacher, a farmer & a social worker, is inspiring many lives in his capital town of Dushanbe, Tajikistan.

He was diagnosed with an unusually large heart, 5 times larger than the normal size and 2 blockages in his arteries. Due to the pressure on his heart, the pumping of blood reduced from 60% to 20%, leading to heart failure.

The CIMS team of cardiac surgeons reshaped, resized and restored his heart to a normal size through globally practiced SVR (Surgical Ventricular Restoration) procedure along with a bypass surgery. This resulted in better pumping and better efficiency of the heart.

Mr. Isoev inspired us that failures in lives can be reshaped.



Care Institute of Medical Sciences World-class practices. Trusted by doctors.

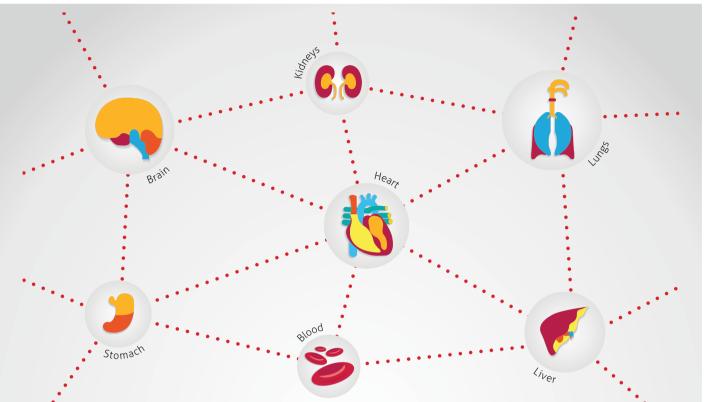
## www.cims.me 🛛 🗗 🔽 🕒 in

APPOINTMENTS: (L) +91 79 3010 1200 / 1008, (M) +91 98250 66661, (E) opd.rec@cimshospital.org AMBULANCE & EMERGENCY: (M) +91 98244 50000 / 97234 50000 / 90990 11234 **24x7 Helpline** +91 70690 00000

Plot #67/1, Opp. Panchamrut Bunglows, Nr. Sukan Mall, Off. Science City Rd., Sola, Ahmedabad – 380 060, Gujarat, INDIA

CIMS Hospital Pvt. Ltd. | CIN: U85110GJ2001PTC039962 | info@cims.me | CIMS Hospital India App on: 🚺 🖽 🕟





## Our body is one big family. When one organ is upset, others too feel the pain.

Just like a family, our body consists of multiple organs. When one organ fails, it disturbs the balance & functioning of the other organs. Thus, making the patient critical. This requires monitoring by critical care specialists who treat the affected organ and prevent multiple organ failure.

#### CIMS CRITICAL CARE

- 24 x 7 Critical Care Intensivists & Paramedics
- Best-in-class Technology
- Advanced Critical Care support Systems for Kidney, Lung & Heart
- Best Peri-Operative Care for high risk patients with multi-speciality requirements
- Green ICUs for patient's mental well-being

CIMS Critical Care Team comprises of Intensivists and specially trained Nurses who ensure reduced risks and faster recovery. Our team specializes in the treatment of swine flu, complicated dengue, malaria, multi-organ infections and post surgery complications.

> CINS Care Institute of Medical Sciences World-class practices. Trusted by doctors.

24x7 Helpline: +91 70690 00000

APPOINTMENTS: (L) +91 79 3010 1200 / 1008, (M) +91 98250 66661, (E) opd.rec@cimshospital.org AMBULANCE & EMERGENCY: (M) +91 98244 50000 / 97234 50000 / 90990 11234

CIMS Hospital, Near Sukan Mall, Off Science City Road, Sola, Ahmedabad, Gujarat, INDIA





## Healthy Heart Registered under RNI No. GUJENG/2008/28043 Published on 5<sup>th</sup> of every month

Permitted to post at PSO, Ahmedabad-380002 on the 12<sup>th</sup> to 17<sup>th</sup> of every month under Postal Registration No. GAMC-1725/2015-2017 issued by SSP Ahmedabad valid upto 31<sup>st</sup> December, 2017 Licence to Post Without Prepayment No. CPMG/GJ/97/2014-15 valid upto 31<sup>st</sup> December, 2017

If undelivered Please Return to :

CIMS Hospital, Nr. Shukan Mall,

Off Science City Road, Sola, Ahmedabad-380060.

Ph.: +91-79-2771 2771-75 (5 lines)

Fax: +91-79-2771 2770

Mobile : +91-98250 66664, 98250 66668

Subscribe "Healthy Heart": Get your "Healthy Heart", the information of the latest medical updates only ₹ 60/- for one year. To subscribe pay ₹ 60/- in cash or cheque/DD at CIMS Hospital Pvt. Ltd. Nr. Shukan Mall, Off Science City Road, Sola,
 Ahmedabad-380060. Phone : +91-79-3010 1059 / 3010 1060. Cheque/DD should be in the name of : <u>"CIMS Hospital Pvt. Ltd."</u> Please provide your <u>complete postal address with pincode, phone, mobile and email id</u> along with your subscription



CIMS Hospital Pvt. Ltd. 1 CIN : 000110092001P1C039902 1 Info@cims.me 1 www.cims.me

Printed, Published and Edited by Dr. Keyur Parikh on behalf of the CIMS Hospital Printed at Hari Om Printery, 15/1, Nagori Estate, Opp. E.S.I. Dispensary, Dudheshwar Road, Ahmedabad-380004. Published from CIMS Hospital, Nr. Shukan Mall, Off Science City Road, Sola, Ahmedabad-380060.

