

GLOBAL THROMBOSIS FORUM



GTF

Global Thrombosis Forum

(an affiliate of the North American Thrombosis Forum – NATF)

In partnership with NATF in Community

Service from Thrombosis

(An associate Society of the International Union of Angiology)



Third Rajan Memorial Symposium: Pathophysiology and Treatment of Pulmonary Embolism

Sunday, January 8, 2023, 11:00 am - 3:20 pm EST

Venue: Residence of Dr. & Mrs. Rakesh and Divya
Raina, 2700 Sugarloaf Club Drive, Duluth, GA

30097, 404-921-7673



AGENDA

Comperes: Harith Dhinakaran and Shivam Gupta

10:30 am Guest Arrival

11:00 am Introduction: Jawed Fareed, Ph.D. and Atul Laddu, M.D, Ph.D.

11:10-11:25 am What are DVT and PE? Avneesh Jadhav and Krish Raina

11:25-11:40 am Pathophysiology of DVT: Ishaan Dhaneshwar and Shriya Sawant

11:40-11:55 am Pathophysiology of PE: Richa Mahajan and Mala Niverthi

12:00-12:20 pm Keynote Speaker: Stephan Moll, MD, Professor of Hematology at UNC, topic: “DVT and PE: making a diagnosis and creating a treatment plan”.

12:25-12:40 pm: Role of warfarin in the management in 2023 and beyond: Charles A. Carter, PharmD, MBA

12:45-2:00 pm: Lunch

2:00-2:15 pm Heparin vs DOAC’s in the management of PE: Jawed Fareed, PhD

2:15-2:30 pm Biomarkers in risk stratification of DVT: Dr. Fakhia Siddiqui

2:30 -2:45 pm Anticoagulants in COVID-19: Bulent Kantarcioglu, MD

2:45-3:00 pm My impressions about the GTF programs: Eduardo Ramacciotti, MD, PhD

3:00-3:10 pm My impressions about GTF events at the IUA Congress: Prof. Pedro Pablo Komlos, MD

3:10 -3:20 pm Concluding remarks: Atul Laddu, M.D, Ph.D.

PRESENTATION ABSTRACTS

What are DVT and PE?

by Krish Raina and Avaneesh Jadhav

DVT (Deep Vein Thrombosis) and PE (Pulmonary Embolism) are both serious medical conditions and should be treated as an emergency. The incidence of DVT and PE is very high, but often not acknowledged enough. Many people start off not knowing they have this condition. Each year over 200,000 people develop DVT in the U.S, with over a fourth of them having it due to complications of PE.

Both DVT and PE most commonly occur in people aged 60 and older, although can occur at any age.

Pathophysiology of PE

by Mala Niverthi and Richa Mahajan

Pulmonary Embolism is one the most dangerous conditions that occurs to nearly 900,000 people every year in the United States. PE is caused by the embolus traveling from the DVT site to the lungs. According to Dr. Joseph Caprini, PE is one of the most preventable conditions. In normal lungs, ventilation and perfusion are well matched. In a patient with PE, transfer of oxygen is impaired when alveolar ventilation to pulmonary capillaries is reduced relative to blood flow, there is a physical obstruction of blood flow, release of humoral factors, such as serotonin from platelets, thrombin from plasma, and histamine from tissue. PE increases pulmonary vascular resistance due to vasoconstriction caused by hypoxia; the mean pulmonary artery pressure can double to approximately 40 mm Hg. Under extreme circumstances

in patients with chronic thromboembolic pulmonary hypertension, the pulmonary arterial pressure can exceed the systemic arterial pressure. It is therefore important to be aware of the pathophysiology of PE so we can actively work to lower the incidence rate of PE. We researched into the various aspects of pathophysiology of PE.

Pathophysiology of DVT

by Ishaan Dhaneshwar and Shriya Sawant, The GTF Group

DVT is one of the most common and serious forms of VTE, with an incidence of 200,000 cases per year in the US alone. Roughly 50% of all DVT cases result in PE. Virchow's classic triad for thrombus formation consists of venous stasis (stagnation), vessel wall damage, and a hypercoagulable state. Prolonged, cramped sitting during long-distance travel interferes with venous flow in the legs creating venous stasis. Seat-edge pressure to the popliteal area (the back area between the leg and the thigh) of the legs can aggravate venous stasis as well as contribute to vessel wall damage. Today, we are going to take a deeper look at the pathophysiology of DVT.