



Getting to know...

DR. LEE SOON KHAI

Consultant Vascular and Endovascular Surgeon

Dr. Lee Soon Khai is a Consultant Vascular and Endovascular Surgeon practising in Pantai Hospital KL. Dr. Lee is one of very few Vascular Surgeons in the country. There are just over 20 Vascular Surgeons serving a population of about 28 million in Malaysia. By comparison, Singapore has almost the same number of Vascular Surgeons serving just five million people.

A Vascular Surgeon treats all problems related to the arteries and veins of the body, except those of the heart.

Diseases of the arterial system include peripheral arterial disease (leg pain, ulcer, gangrene and so on), thoracic outlet syndrome (pain, numbness of arms), ischaemic stroke (narrowing of carotid artery), aneurysm (dilatation of artery with the risk of rupture) and renal artery narrowing (which may cause hypertension and end-stage renal failure).

Some examples of diseases of the veins are varicose veins, spider veins and deep vein thrombosis.

Another condition treated by Vascular Surgeons is hyperhidrosis (sweaty palms). With their experience in treating Raynaud's disease (spasm of arteries to the hands), Vascular Surgeons are well trained in Endoscopic Thoracic Sympathectomy (ETS).

It takes quite a number of years of training to qualify as a Consultant Vascular and Endovascular Surgeon.

Dr. Lee explained: "I obtained my Master of Surgery (UKM) in 2002 after four years of training. I then worked as a General Surgeon for a year. Following that, I started Vascular Surgery training in 2003 at the Hospital Kuala Lumpur. To improve my skills and to update myself on innovative techniques, I then went on to the Royal Perth Hospital in Australia for my Fellowship in 2005 and 2006. On my return to Malaysia in January 2007, I practised as a Consultant Vascular and Endovascular Surgeon in Hospital Kuala Lumpur."

Dr. Lee has been a visiting Consultant Vascular and Endovascular Surgeon at the Tropicana Medical Centre since 2009. He



left government service in August 2010 and has been the resident Consultant Vascular and Endovascular Surgeon at Pantai Hospital KL since then.

VARICOSE VEINS: WHY EVLT IS SUPERIOR TO TRADITIONAL STRIPPING SURGERY

If you have varicose veins or unsightly dilated superficial veins of the legs, you should consult and seek treatment from a Vascular Surgeon before complications arise. Varicose veins are not just a cosmetic problem.

Dr. Lee explains: "Patients come to me at various stages of the problem. In early stages, patients usually suffer pain, swelling, heaviness and, sometimes, unsightly veins. In late stages, there will be skin discolouration, venous ulcers or bleeding. A few of my patients had their veins burst while showering or sleeping."

Traditional Vascular Surgery involves open surgery. With the advent of minimally

invasive surgery, Endovascular Surgery is now the trend for the treatment of most arterial and venous diseases. Endovascular Surgery is a "super specialty" within the field of Vascular Surgery.

"Endo" simply means "inside", so Endovascular Surgery is about treating arteries and veins from within.

For example, with varicose veins, this treatment entails closing the veins from inside using a laser fibre passed in through a needle puncture. This is known as Endovenous Laser Treatment (EVLT).

Dr. Lee, who has undergone certified EVLT training in the Alabama Phlebology Training Institute in the USA, now uses the CoolTouch CTEV 1320nm laser for treating varicose veins.

He says, "Since the advent of EVLT, stripping of varicose veins should be a thing of the past. Traditionally, those with bad skin problems or ulcers associated with varicose veins and those with a history of bleeding would be recommended this treat-

ment. But vein stripping meant more pain, scarring, bruising, longer recovery periods, risks involved with general anaesthesia and a higher recurrence rate.

"EVLT is superior for a variety of reasons. It is done under local anaesthesia as a day care surgery. There is minimal pain and bruising after the procedure. Patients can walk immediately after EVLT. Parallel veins, if present, can be treated at the same sitting. This will minimize the recurrence rate.

"My patients are all usually surprised at the change after treatment. Their legs feel so much better. There's no more pain, heaviness and discomfort."

Patients who have varicose veins may also have associated spider veins. Spider veins are like varicose veins but smaller. They also are closer to the surface of the skin than varicose veins. Often, they are red or blue. They can look like tree branches or spider webs with their short, jagged lines.

During the same operative session, treatment of the spider veins can be done. Sclerotherapy is the treatment Dr. Lee uses for spider veins. A needle is used to inject a liquid chemical (known as a sclerosant) into the vein. The chemical causes the vein walls to stick together, seal shut and eventually the vein turns into scar tissue. Once the injection is done, the vein will fade within six months. Two or three treatments may be needed for best results.

TREATMENT FOR SWEATY PALMS

Sweaty palms or hyperhidrosis is a medical condition whereby patients sweat excessively on the palms. Hyperhidrosis may also involve the armpits and the soles of the feet. It is reported that this occurs in about three percent of the population and commonly affects teenagers and young adults. Seventy percent of those with symptoms do not know where to seek treatment.

There is a variety of treatment for this problem, from aluminum-based lotions to electrophoresis (electric current therapy) and Botox injections. However, all these treatments are ineffective or may just provide short-term partial relief.

Definitive treatment of this condition is by way of Endoscopic Thoracic Sympathectomy (ETS). ETS is a keyhole technique that is safe and effective, with a short recovery time. This treatment entails cauterizing the part of the nerve that is responsible for the excessive stimulation sent to the sweat glands in the palms.

This method has proven very successful. Excessive sweating of the palms ceases immediately after successful ETS. The patient would immediately be able to perform functions that he or she was not able to do

HOW DO YOU AVOID GETTING VARICOSE VEINS?

"Avoid standing or sitting for long periods of time," advises Dr. Lee Soon Khai.



before, such as writing without wetting the paper and shaking hands with others without embarrassment.

WHY VASCULAR SURGERY?

There are many specialisations in the field of Surgery. So, why did Dr. Lee choose this area of specialisation over others?

"I find Vascular Surgery to be a very challenging and dynamic field. For example, the scariest scenario for any general surgeon when performing a laparotomy for an emergency abdominal trauma case would be arterial injury or a leaking abdominal aortic (the largest artery in the abdomen) aneurysm. The desire to be able to handle every possible situation if I had to do an emergency laparotomy spurred me on to choose Vascular Surgery as my specialty.

"On top of that, Vascular Surgery has expanded its application to Endovascular Surgery. This is an exciting area of super-specialty with minimally invasive procedures for treatment of arterial and venous problems. Vascular or Endovascular surgery, or a combination of both, can be performed depending on the best option for the patient."

Dr. Lee, who was the secretary of the Vascular Society of Malaysia, now performs some 30 to 40 surgical procedures a month. Some 10 to 15 percent of his patients are foreigners. He has performed about 200 EVLT cases so far.

In his free time, Dr. Lee enjoys painting, music, movies and fine dining. He also enjoys traveling.

What does he find most satisfying about his work? "The ability to help patients to return to their normal lifestyle. I am very happy when patients and their family members thank me for a job well done."

DR. LEE SOON KHAI'S AREAS OF EXPERTISE

VEINS

- Endovenous Laser Treatment (EVLT) for varicose veins
- Sclerotherapy for spider veins
- Caval filter insertion

AORTA

- Thoracic Endovascular Aortic Repair (TEVAR) for thoracic aneurysm and dissections
- Endovascular Aneurysm Repair (EVAR) for abdominal aortic aneurysm (AAA)
- Open surgical repair for AAA

CAROTID ARTERIES

- Carotid artery stenting (CAS)
- Carotid endarterectomy (CEA) (Open repair)

PERIPHERAL VASCULAR DISEASES

- All peripheral bypasses: Aorto-bifem, axillo-bifem, fem-fem, fem-pop, fem-distal
- Angioplasty
- Sub-intimal angioplasty
- Angioplasty & Stenting

VASCULAR ACCESS

- Primary fistula creation: snuff box, radio-cephalic, brachio-cephalic, brachio-basilic (BBF) and BBF transposition
- Synthetic bridge or loop graft AVF
- Salvage procedures which include percutaneous and open venoplasty, DRIL procedure for steal syndrome, venous bypasses for central venous occlusion
- Duplex scanning and monitoring of AVFs
- Chemoport insertion

ENDOSCOPIC THORACIC SYMPATHECTOMY (ETS)

Keyhole surgery for hyperhidrosis (sweaty palms)