SHAKING HANDS. A CRUMPLED EXAMINATION PAPER THAT'S SO WET IT'S ABOUT TO DISINTEGRATE. EXCESSIVE UNDERARM SWEAT THAT LEAVES WET RINGS. BAD BODY ODOUR. ALL ARE EMBARRASSING FOR SUFFERERS OF HYPERHIDROSIS, OR EXCESSIVE SWEATING. **O. P. JADE** LOOKS AT THE SOLUTIONS THAT ARE BEING OFFERED BY THE EXPERTS.

fter I met consultant cardiothoracic surgeon Dr. Syed Mohd Adeeb Syed Jalaluddin to understand the causes of excessive sweating and its cures I became very thankful that I don't have this condition. According to Dr. Adeeb, excessive sweating is quite an inconvenience to those who suffer from it.

Patients with excessively sweaty palms find difficulty in performing daily chores and activities. They cannot handle paper documents, keep clothes dry or shake hands. While some people may find their excessive sweating issue embarrassing, it can also be life-threatening to a certain extent, if left untreated. "For instance, an electrical engineer, whose job involves a lot of wiring and electric circuits – if not careful, this condition could cost him his life," remarks Dr. Adeeb. While some choose to live with it, it is advisable to treat it.

Consultant vascular and endovascular surgeon, Dr. Lee Soon Khai, says that about 70 percent of victims of hyperhidrosis are teenagers and young adults. In Malaysia, there are about 800,000 sufferers. "The condition of sweaty palms or hands can get more severe towards the late teenage years and early adulthood," adds Dr. Lee.



Consultant cardiothoracic surgeon Dr. Syed Mohd Adeeb Syed Jalaluddin



Consultant vascular and endovascular surgeon Dr. Lee Soon Khai

WHAT CAUSES EXCESSIVE SWEATING?

Although the causes behind this sticky (and traumatic) condition are still debatable, many experts believe that it is "caused by a hyperactive sympathetic nervous system – causing the sweat glands to produce sweat excessively; either in the palms, feet, armpits or face," explains Dr. Lee.

Apart from that, the condition has also been linked to "obesity, an over active thyroid gland, excessive consumption of hot or spicy food and high levels of emotional stress or anxiety, just to name a few," adds Dr. Adeeb. Hyperhidrosis is also considered genetic. "Similar to cancer, it's in the genes," he adds.

According to Dr. Adeeb, when sweating "becomes out of the ordinary or is a hindrance in your daily chores or activities" one should consider seeking medical advice. Adding to the severity of the condition, Dr. Adeeb mentions that hyperhidrosis can also make sufferers socially phobic. "The condition may cause the patients psychological and emotional distress. Such distress usually impacts the ladies more as it is somehow considered not too attractive or pleasant to have sweaty and cold palms," adds Dr. Adeeb. Patients can also be prone to fungal skin infections if hygiene is poor.

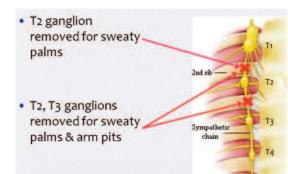
ETS – A MINIMALLY INVASIVE SOLUTION

When asked about his experience with treating patients of hyperhidrosis, Dr. Adeeb remembers his very first Endoscopic Thoracic Sympathectomy (ETS) procedure. "It was back in year 2000. A patient with excessive sweating on his palm (also known as palmar hyperhidrosis) came to see me. He was a general manager of a multinational company. He said he had been living with the problem since his school years. He realised that he couldn't live with the condition anymore – as it had caused a lot of inconvenience with his work. Imagine the number of handshakes he had to make when meeting clients, and all the documents he had to sign in a day. He desperately needed a solution for his condition – once and for all," explains Dr. Adeeb.

Dr. Adeeb explained the solution for this condition to the patient – but he hadn't done it before. "Thank god it all went well," reminisces Dr. Adeeb, with a smile. He was very glad to have helped that patient, who found great relief from those embarrassing moments.

HOW IS ETS PERFORMED?

ETS is a minimally invasive surgical procedure, where certain portions of the sympathetic nerve chain (ganglion) are removed. "Apart from hyperhidrosis, it is also used to treat facial blushing, Raynaud's disease



and reflex sympathetic dystrophy," explains Dr. Lee, who has performed ETS on more than 120 patients over the past three years.

ETS is an endoscopic surgical procedure performed with the assistance of miniature cameras. "Under general anaesthesia, a small incision, approximately one centimetre in length, is made under both armpits. A thoracoscope containing an endoscopic camera and other instruments is then inserted through the small incision into the chest cavity," explains Dr. Lee. Part of the thoracic sympathetic chain responsible for the excessive sweating is then coagulated.

The ultimate goal of the surgery is to

"After ETS, up to 60 percent of the patients will have compensatory sweating to a varying degree. The most commonly affected areas are the back and the abdomen." – Dr. Lee Soon Khai, consultant vascular and endovascular surgeon.



Photo of patient suffering from palmar hyperhidrosis before and after the ETS procedure.



The equipment used to perform ETS.

SYED



The thoracoscope is inserted into the chest cavity.

remove the ganglion that sends signals to the sweat glands - in order to stop the excessive sweating at localised areas on the body. "The removal of the T2 and T3 ganglions addresses sweaty palms and armpits," elaborates Dr. Lee.

ETS is a day care procedure, where patients are allowed to go home on the same day after the surgery. "It is not a complex procedure. It is performed in under an hour," says Dr. Adeeb. Elaborating, he explains that patients are normally advised to return after six months for a post-operation consultation.

As compared to other methods, this minimally invasive procedure is both safe and effective. "It provides a permanent cure for the condition. The recovery period is also very short, with not much pain and bruising or potential scarring," explains Dr. Lee.

Are there any drawbacks to this treatment? Dr. Lee says that there is one to look out for. "One of the drawbacks is compensatory sweating. After ETS, up to 60 percent of the patients will have compensatory sweating to a varying degree. The most commonly affected areas are the back and the abdomen. There is no other drawback post ETS if it is done properly." The cost of ETS treatment is about RM10.000.

For someone who's afraid to go under the knife, there are also several non-invasive methods to curb excessive sweating. "The non-invasive solutions may work for milder cases, but it may be costlier or may not be practical, in the long run. For moderate to severe hyperhidrosis, ETS has been proven to be a good solution," says Dr. Lee. The success rate of ETS for treating excessive sweating is about 98 per cent.

Dr. Adeeb further elaborates that the difference between surgical (ETS) and nonsurgical options (such as injections with botulinum A - Botox or Dysport) is that "ETS addresses the root causes of excessive sweating, as compared to Botox, which only blocks the signal (nerve impulses) at the junction between the nerve and sweat glands and temporarily stops excessive sweating."

Indeed, botulinum A is temporary and the injections would need to be repeated every six months or so.

SURGICAL OR NON-SURGICAL?

Excessively sweaty palms can be very disabling and disturbing. Despite this, about



shown on the monitor.

ENDOSCOPIC THORACIC SYMPATHECTOMY

The Benefits

- The only procedure available that provides the possibility of a permanent solution to hyperhidrosis.
- It is proven to be safe and effective.
- Patients are able to leave on the day of the procedure.
- Patients are able to return to their normal daily routine within a short time.
- Up to 98 percent success rate.

Drawbacks

- The cost perhaps: RMI0,000.
- Up to 60 percent of patients will have compensatory sweating which most commonly affects the back and the abdomen.

70 percent of sufferers choose to live with it and do not seek medical help, according to Dr. Lee.

Dr. Adeeb advises those who suffer from the condition to consider medical consultation. "The important thing to do is to first understand your condition. You can decide later whether to go for surgical or non-surgical treatment," advises Dr. Adeeb. But regarding the effectiveness of botulinum A injections, Dr. Adeeb adds, "They can be very painful. Depending on the patient's condition, about 30 to 50 injections may be required!" The cost is also another factor to consider. These injections also range from RM2000 to RM3000 per treatment. "The sad truth is that the treatment only lasts for about six to eight months. Imagine the pain one has to go through during the injections - twice a vear," remarks Dr. Adeeb.

NON-SURGICAL SOLUTIONS FOR HYPERHIDROSIS

- Botulinum A injections To paralyse the sweat glands
- Iontophoresis To reduce the activity of the sweat glands by using electric shocks and water
- · Antiperspirant products or silicon powder Prescribed and non-prescribed
- Oral medication Drugs such as Oxybutynin chloride
- Traditional Chinese Medicine (TCM) To correct excessive sweating by encouraging selfhealing of the body. Uses Chinese herbs like Dang gui (Angelica sinensis) and gei ji.