

New way to banish varicose veins

An improved procedure can get rid of them with supposedly less pain and bruising. JOAN CHEW reports

When American Wende Salyards was 17, she was voted to have the best legs during her high school graduation ceremony.

While shapely, her legs were far from flawless; she had prominent bluish veins which formed a heart-shape on her lower left leg.

They made her coy about showing her legs off in a skirt or a dress. But since December, Ms Salyards, now 43, has been out shopping for precisely those outfits.

The housewife, a resident here, was diagnosed

with varicose veins last year and underwent the Vnus Closure procedure, a minimally invasive technology that was made available here last July.

While there are conventional treatments, such as vein stripping, to remove those purple criss-crosses, the new procedure is said to be a less painful experience post-surgery.

Ms Salyards said her veins became prominent when she was about 13. They became progressively more pronounced and bulging, especially after she gave birth to her fifth child five years ago.

In her own words, the loopy veins that covered half her shin were the "only flaw" in her otherwise immaculate appearance.

She recalled: "The first thing people saw was

Worldwide,
35%
of women above
the age of 20 have
varicose veins



PHOTOS: ASHLEIGH SIM, COURTESY OF WENDE SALYARDS, DR JOHN TAN
A confident Ms Salyards and Dr John Tan, the surgeon who treated her varicose veins with a new procedure. (Inset) Before the treatment.

Is the new method really better than the old?

Not all doctors are enamoured of the Vnus Closure procedure that Dr John Tan of The Vein Clinic endorses.

Dr Imran Nawaz, medical director of the Singapore Vein Centre, is hesitant about taking up the new procedure, preferring to wait until it has a longer-term track record of five years or more.

The Vnus Closure procedure is a modification of the endovenous laser (EVL) treatment which has been around for the last decade.

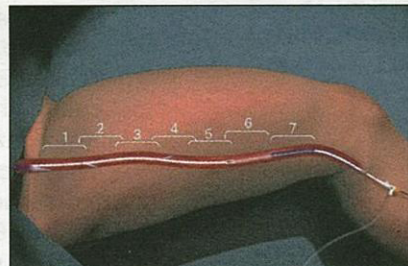
Using ultrasound, both procedures – performed under local anaesthesia – involve inserting a small tube called a catheter into the defective vein through a small opening in the skin (above right).

The EVL process uses a fine laser wire to fire laser pulses through the catheter. It uses only the tip of the catheter to burn and hence, close the vein.

In the new process, the catheter delivers radio frequency heat to the vein wall, which shrinks and seals the vein.

Dr Tan of The Vein Clinic currently offers both types of procedures to his patients.

Those with diseased veins



The radiofrequency catheter can treat 7cm of the varicose vein at one time. In contrast, the old method could only burn the vein using the tip of the catheter.

shorter than 7cm will be put on EVL treatment, while the majority are given the new treatment.

Dr Tan admits that EVL is comparable to the new procedure when it comes to the success rate and long-term results, but he believes that patients treated with the Vnus procedure has "significantly less discomfort and bruising and a shorter recovery".

He pointed to a multi-centre trial of 69 patients in 2007, which reported that those who went through the new procedure experienced less pain, bruising and tenderness than those who went through the EVL one.

For example, 48 hours after surgery, the group which went

through the new procedure reported a pain level of 0.7, as compared to the 1.9 for the other group, or about three times as much pain.

After 48 hours, those in the Vnus group experienced no bruising in 67 per cent of the limbs, while those in the EVL group had no bruising in only 20 per cent of the limb.

However, such results have not convinced Dr Nawaz.

He said: "We need to look at its long-term track record that spans five years or longer. Only when there is significant advantage over EVL will it then become worthwhile for doctors to learn the technology and invest in the equipment."

When shown the results of the multi-centre trial conducted at five American sites and one European site, Dr Nawaz pointed out that the results cannot be considered significant.

He said the sample size was too small and noted that the trial was supported by Vnus Medical Technologies, which produces the ClosureFast radiofrequency catheter that was tested.

A better gauge of its efficacy

would be an independent trial which compares the new procedure with EVL that uses the latest laser tool.

The particular EVL laser used in that trial is now outdated, he said.

Moreover, the intensity of post-surgery pain reported on a 10-point Likert scale, ranging from 0 (no pain) to 10 (most severe pain), showed that both groups of patients had only mild pain.

Dr Nawaz said: "Can patients really tell the difference between mild pain and even milder pain? "It would be a different thing if the procedure claims to cause no pain at all."

As for bruising, Dr Nawaz said: "Bruises may not cause pain and will heal by themselves."

Also, whether a patient is bruised would depend on a surgeon's competence, as well as the power settings used.

For patients, the big question would be cost. Would patients have to bear the cost of the new equipment?

Dr Tan said the cost of both procedures are on par, at between \$6,000 and \$11,000 before subsidy.

Joan Chew

my unusual-looking leg, so I questioned why the veins couldn't be located at the back of my leg instead."

More than just a cosmetic issue, the varicose veins caused Ms Salyards much physical distress.

They kept her up at night because they itched and caused cramps. Her legs would feel heavy and tired after she was on her feet for more than an hour.



An example of abnormally dilated varicose veins. These belong to a 40-year-old Chinese woman.

When veins malfunction

Dr John Tan, a consultant vascular surgeon at The Vein Clinic, explained that valves in the vein ensure a one-way blood flow from the rest of the body back to the heart.

The blood in the legs has to work against gravity for this to occur.

Venous reflux disease develops when these valves become damaged or diseased so that they

do not close properly and result in a two-way blood flow.

The veins then become abnormally dilated and, if left untreated, the symptoms, such as pain, swollen limbs, leg heaviness and fatigue, can worsen.

Dr Tan said: "The longer these patients stand, the worse their legs ache. They get cramps at night as they experience the effect of daytime blood congestion."

Complications, such as ruptured veins, vein infection (varicophlebitis) and deep vein thrombosis, may result.

Dr Tan said that worldwide, 35 per cent of women and 20 per cent of men above the age of 20 are plagued with varicose veins.

Risk factors include family history, multiple pregnancies and one's lifestyle, which incorporates prolonged sitting and standing.

Ms Salyards' 75-year-old mother also had varicose veins, so it was not unusual for her to have inherited the weakness of the veins, said Dr Tan.

During each of her five pregnancies when the foetus sat on her pelvis, it put pressure on the large vein on the right side of her body, which in turn increased pressure in her leg veins.

Hormonal changes during pregnancy also

result in dilation of the veins, so that the two halves of the valves in the vein do not meet to block the blood flowing back.

Dr Tan pointed out that varicose veins that develop during pregnancy usually subside two months after delivery, but are likely to recur during subsequent pregnancies.

In Ms Salyards' case, her pregnancies only exacerbated her condition.

Dr Tan said he has performed the new procedure on close to 80 patients so far, many of whom resume normal activities by the next day and engage in sports after a week.

As part of her recovery, Ms Salyards used compression stockings for five days after her surgery and has stopped playing tennis competitively for the time being.

She said chirpily: "When I get ready to go out these days, I admire my legs in the mirror. Even after I was shown the 'before' and 'after' photos in Dr Tan's clinic, nothing beats seeing the results on yourself.

"It's a huge confidence booster. Looking down and not seeing the varicose veins feels weird, but I'm happy that my legs look even better than when I was young," she added.