**Venous scan reports**

1. US Doppler lower limb veins Lt (recurrent):

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

Previous high tied, no SFJ noted now. Now neo-vascularisations noted in the groin, which connect to CFV, with gross reflux noted. The residual LSV was seen in proximal thigh, measured 5-6mm in diameter in the thigh. The LSV remains within the fascia and straight to distal thigh. It leaves the fascia (becomes very superficial, about 2-3mm to the skin) above the knee, it sheds branches which supply the varicose veins of distal thigh and calf.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Rt :

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 5-11mm in diameter in the thigh, it remains within the fascia in the thigh but not entirely straight. The LSV leaves the fascia and sheds branches below the knee.

No true SPJ noted, the SSV was patent and competent.

1. US Doppler lower limb veins Both

Right: (recurrent)

The CFV and proximal SFV were patent and competent. SFV becomes incompetent below mid-thigh with mild/modest reflux noted. Modest reflux noted in the above knee POPV and gross reflux in the below knee POPV. The LSV was stripped. There is an incompetent perforator (5-6mm) noted in the medial calf (about 5-6cm below knee), which supplies the medial calf varices. There are some superficial branches noted in lateral calf, however, no significant reflux noted.

No true SPJ, the SSV was patent and competent.

Left:

The CFV was patent and competent. Mild/modest reflux noted in the SFV and popliteal vein.

The SFJ and LSV were patent and competent. There are some small superficial branches of LSV noted in the medial calf, no significant reflux noted.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Rt (recurrent)

The CFV, PFV origin, SFV and popliteal vein were patent and compressible, with no reflux noted.

The LSV has been stripped, no SFJ noted now. There was an incompetent superficial vein noted in medial thigh, with gross reflux noted. It appeared partially supplied by the tiny varices in the groin, which connect to CFV and partially supplied by the vulvar or pelvic varicose veins. The superficial vein measured 3.7-4.3mm in the thigh, and supplies the varicose veins of medial thigh and calf.

The lower 2/3 calf was not scanned due to patient's ulcer dressing and tolerance.

The SPJ and SSV were patent and competent.

There are some small superficial branches noted in the posterior calf, which were connected to the gastrocnemius veins. However, no significant reflux noted in the gastrocnemius veins or in these superficial branches.

1. US Doppler lower limb veins Both

Right:

The CFV, PFV origin and SFV were patent and competent. Mild reflux seen in the above knee popliteal vein now. The below knee popliteal vein was competent. The SFJ, LSV, SPJ and SSV were patent and competent.

Left:

The CFV, PFV origin, SFV and popliteal vein were patent and competent. The SFJ, LSV, SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Lt

The CFV, PFV origin, SFV, Popliteal and gastrocnemius veins were patent and competent.

The SFJ and LSV were patent and competent.

No true SPJ noted, the SSV was patent and competent.

There are some superficial branches noted in the medial calf redness area, however, no reflux noted.

1. US Doppler lower limb veins Lt

The CFV, PFV and SFV were patent and competent. Mild-moderate reflux noted in the above knee popliteal vein and moderate-gross reflux noted in the gastrocnemius vein. Below knee popliteal vein was patent with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV (9-12mm) in proximal thigh. The LSV sheds large branches in mid-thigh, which supply the varicose veins of medial thigh and calf. The main trunk of LSV reduced the size and becomes competent below this point. The main trunk of LSV remains within the fascia till mid-calf level, it leaves the fascia and connects to the superficial varicose veins in distal calf.

The SPJ was patent and competent.

There is an incompetent perforator noted in the mid posterior calf, which also contributes the calf varicose veins.

1. US Doppler lower limb veins Both

Right:

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the AASV (4.5mm) which supplies the anteromedial varicose veins of the thigh. The main LSV of proximal thigh was patent and competent. One varicose vein drains to LSV in mid-distal thigh (about 10 cm above the knee), which makes the LSV becomes incompetent and its size increased to 6.5mm. The LSV sheds an incompetent posteromedial branch in mid-distal thigh (about 7-8cm above the knee), which takes the reflux. The LSV becomes competent again below this point.

The calf varicose veins connect to main trunk of LSV in mid-distal calf; it becomes incompetent and tortuous in distal calf.

The SPJ and SSV were patent and competent.

Left:

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the AASV (4.5mm) and moderate reflux in LSV (4.7mm).

The AASV and LSV sheds branches supply the varicose veins of thigh and calf.

The LSV remains relatively straight and within the fascia to mid-calf, it leaves the fascia below this level.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Lt (previous treated)

The CFV, PFV origin, SFV and popliteal vein were patent and compressible, with no significant reflux noted.

The SFJ was patent and competent. The LSV was partially stripped before. No reflux noted in the superficial branches.

The SPJ and SSV were patent and competent.

There are several visible superficial branches noted in the calf (just above the ulcer dressing), however, no reflux noted.

1. US Doppler lower limb veins Both

Right:

Suboptimal view of deep veins due to patient's habitus, the curvilinear probe was required to obtain the images.

The CFV, SFV and popliteal vein appeared patent and compressible, with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the AASV (9mm) which supplies the visible varicose veins of thigh and calf.

The LSV was patent and competent.

No true SPJ noted, the SSV of proximal calf was patent and competent. Some varicose veins drain to SSV in mid-distal calf, which makes the SSV increased size to 7mm and becomes incompetent below this point.

Left:

Suboptimal view of deep veins due to patient's habitus, the curvilinear probe was required to obtain the images.

The CFV, SFV and popliteal vein appeared patent and compressible, with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV (8.6mm), the LSV remains straight and within the fascia to distal-thigh level. It sheds large branches which supply the visible varicose veins of thigh and calf. The main trunk of LSV reduced the size to 4mm and becomes competent below thigh level. Some varicose veins drains to LSV below the knee, the below knee LSV (5-6mm) becomes incompetent again and supplies the calf varicosities.

The SPJ and SSV were patent and competent.

There are visible varicose veins noted in posterolateral thigh, which unable to tell the origin. They might be fed by the pelvic veins.

1. US Doppler lower limb veins Rt (recurrent)

Previous RFA+UGFS.

The CFV and PFV origin were patent and competent. Mild-moderate reflux seen in the SFV, becoming gross reflux in the popliteal vein. Incompetence also noted in some of the gastrocnemius veins.

No true SPJ noted now, there is a small incompetent superficial branch (3-4mm) which connects to SFV, with moderator reflux noted. This branch connects to the visible large varicose veins of mid-thigh. Clots noted in these varicose veins due to previous treatment, they were partially recanalised, however, no reflux noted.

Occluded/treated varicose veins also noted in the calf. There is an incompetent perforator noted in the medial calf (about 10cm above the medial malleolus).

Old clots noted in the SSV, it has recanalised now. The SPJ was patent but incompetent with gross reflux seen in the SSV (7mm in size). There are visible varicose veins noted in the calf, some of them were occluded, some remains incompetent.

1. US Doppler lower limb veins Both (recurrent)

Right:

Suboptimal view of deep veins due to patient's habitus and limited mobility.

The CFV, SFV and popliteal vein were patent, with no significant reflux noted.

?Previous treatment, no true SFJ or LSV noted in the thigh. There is a superficial branch (4.6mm) noted in the thigh, which connects to the neovascularization in the groin. However, there was only mild-moderate reflux noted in it, which might due to the poor augmentation flow reaction. There is also a perforator (3.8mm) noted in mid-thigh, which connects to this superficial branch, only mild reflux noted in the perforator.

The SPJ and SSV were patent and competent.

Left:

Suboptimal view of deep veins due to patient's habitus, oedema and limited mobility.

The CFV, SFV and popliteal vein were patent, with no significant reflux noted.

Previous endovenous treatment, no SFJ or LSV noted in the thigh. No large incompetent superficial branch noted in the thigh.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Rt

The CFV were patent with no reflux noted. The SFV was patent with mild reflux noted.

Suboptimal assessment of popliteal vein, as patient cannot stand for long time. It was compressible, no significant reflux noted in sitting position.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 9mm-13.5mm in the thigh. There are some old clots noted in the LSV of distal thigh. The LSV supplies the varicose veins below knee.

The SPJ was patent but incompetent with gross reflux noted in the SSV (11.7mm).

1. US Doppler lower limb veins Lt

The CFV, PFV origin, SFV and above knee popliteal vein were patent but incompetent with modest reflux noted.

Below knee popliteal vein and gastrocnemius veins are patent and competent.

The SFJ and above knee LSV were patent and competent. The LSV becomes incompetent below the knee, measured 4.3mm in size. It leaves fascia in proximal thigh and supplies the medial calf varicose veins.

The SPJ were patent but incompetent with gross reflux noted in the SSV (8.5mm) which supplies the calf varicose veins. Old non-occlusive clots noted in some branches of SSV. There is an incompetent perforator (5.8mm) noted in mid-calf.

1. US Doppler lower limb veins Rt

Suboptimal view of deep veins due to patient's habitus. The curvilinear probe was required to obtain the images.

The CFV, SFV and popliteal vein were patent and compressible, with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 7.4mm-14mm in the thigh, it is slightly tortuous but remains within the fascia in the thigh. The LSV leaves the fascia and becomes tortuous below the knee, it supplies the calf varicosities.

No SPJ noted, the SSV and Giacomini vein were patent and competent.

1. US Doppler lower limb veins Lt

The CFV, SFV and popliteal vein were patent and compressible, with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 6-7mm and remains within the fascia to mid-calf. The LSV was straight in the thigh, it sheds tortuous superficial branches below-mid calf.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Lt

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

The SFJ and LSV were patent and competent.

The SPJ was patent but incompetent with gross reflux noted in the SSV. The SSV measured 3-5.4mm in the calf.

There is an incompetent perforator (2.5mm) noted in mid medial calf.

1. US Doppler lower limb veins Lt

The CFV, SFV and popliteal vein were patent and compressible, with no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 6-10mm in the thigh; it was straight and remains within the fascia until mid-calf. The LSV sheds branches in mid-calf, which supply the calf varicose veins.

No true SPJ note, the SSV was patent and competent.

1. US Doppler lower limb veins Rt

Suboptimal view of deep veins due to patient's habitus and oedema.

The CFV, SFV and popliteal vein were patent and compressible, poor augmentation reaction, however, no significant reflux noted.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 7mm-13mm in size in the thigh. The LSV remains straight and within the fascia to mid-thigh, it leaves the fascia below mid-thigh. The LSV sheds branches below the knee and supplies the varicose veins of medial calf.

The SPJ and the SSV were patent and competent.

1. US Doppler lower limb veins Lt :

The CFV, PFV origin, SFV and popliteal vein were patent, with no significant reflux noted.

The SFJ was incompetent with gross reflux noted in the LSV. The LSV measured 5-7mm in the thigh, it remains straight and within the fascia to distal-thigh. It leaves the fascia to below distal-thigh and sheds branches below the knee, which supply the calf varicose veins.

No true SPJ noted, the SSV was patent and competent.

1. US Doppler lower limb veins Lt

The CFV, PFV origin, SFV and popliteal vein were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 7-18mm in diameter in the thigh. The LSV remains straight and within the fascia to mid-thigh, it leaves the fascia and becomes tortuous in mid-thigh. It sheds branches which supply the varicose veins of medial thigh and calf.

No true SPJ, the SSV was patent and competent.

1. US Doppler lower limb veins Rt

The CFV, PFV origin, SFV and popliteal vein were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV measured 18mm immediately below the junction. The LSV reduced the size to 7mm in proximal thigh and leaves the fascia in proximal-mid thigh; it becomes very tortuous and superficial below this point.

The SPJ and SSV were patent and competent.US Doppler lower limb veins Lt

1. US Doppler lower limb veins Lt

The CFV, PFV origin, SFV, popliteal and gastrocnemius veins were patent and competent.

The SFJ was patent but incompetent with gross reflux noted in the LSV. The LSV remains straight and within the fascia in the thigh, size range 8-12mm. The LSV is very superficial, about 2-4mm to the skin.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Rt

Moderate reflux noted in the CFV and above knee popliteal vein. Gross reflux noted in the SFV and below knee popliteal vein. The PFV origin and gastrocnemius veins were patent and competent.

The SFJ and LSV were patent and competent.

The SPJ and SSV were patent and competent.

1. US Doppler lower limb veins Rt

The CFV, PFV origin, SFV and popliteal vein were patent and competent.

The SFJ was patent but incompetent with gross reflux. The LSV measured 22mm in the groin; it reduced to 11mm in proximal thigh. It remains within the fascia and straight to mid-thigh, it sheds a tortuous superficial branch in mid-thigh. The main trunk reduced size below this point. It stays within the fascia and remains incompetent. The superficial branch drains back to main trunk of LSV at knee level. The LSV increased the size again and becomes tortuous; it sheds branches below the knee, which supply the calf varicosities.

The SPJ and SSV were patent and competent.