

Case 1

US Duplex lower limb veins Rt

VENIFIED-Attended-15-Oct-2021-ZAKINZAKIN-15-Oct-2021

Venous Incomp (RT)

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	R	Reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:  
Perforators:

See below

Comments:

LSV occluded/ablated within the thigh as expected following VNUS.  
Reflux within remnant LSV from very proximal calf level as it is fed by incompetent perforator at proximal medial calf (2mm diameter). Distally LSV is incompetent, runs straight and measures ~3mm. LSV feeds small calibre varicosities towards antero-lateral calf (shin) and medial calf.

Case 2

US Other Examination

VENIFIED-Attended-30-Oct-2021-ZAKINZAKIN-30-Oct-2021

LEFT:

U/S examination demonstrates SFJ reflux. LSV competent, but reflux into ATV, which runs straight for ~8cm where it feeds into varicosities. These course down the anterior aspect of the lower limb.  
VNUS of ATV performed in very proximal thigh, 3cm from SFJ.  
No evidence of DVT post procedure.

Case 3

Venous incomp (LT)

SITE	LEFT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="NR"/>	No reflux
Long saphenous:	<input type="text" value="NR"/>	No reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

Very limited scan due to patient body habitus.

Left Leg:

Where seen, the deep veins are patent, competent, with no evidence of thrombus.  
Anterior shin small calibre superficial varicosities detected; however, unable to detected the source due to oedema/swelling/body habitus.

Case 4

Venous incomp (LT)

SITE	LEFT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="R"/>	Reflux
Long saphenous:	<input type="text" value="NR"/>	No reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

Left:

SFJ incompetent.  
Reflux into ATV. ATV runs straight for 5cm to very proximal thigh where it feeds into varicosity which courses down the antero-lateral aspect of the lower limb.  
Not suitable for VNUS

Case 5:

US Duplex lower limb veins Rt

VENUS

VERIFIED

Attended-06-Oct-2021

ZAKINZAKIN-06-Oct-2021

Venous incomp (RT)

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	R	Reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:

Comments:

Right:

Pelvic vein feeds into LSV just below SFJ. LSV incompetent distally. LSV runs straight and feeds into varicosities at very distal thigh. LSV measures 4-5mm. Suitable for VNUS.

Case 6:

US Duplex lower limb veins Rt

VENUS

VERIFIED

Attended-27-Oct-2021

ZAKINZAKIN-27-Oct-2021

Venous incomp (RT)

Peroneal vein:	NT	No thrombus
Long saphenous:	NT	No thrombus
Short saphenous:	NT	No thrombus
Summary:	N	No DVT

Comments:

Comments:

Right:

No evidence of DVT/phlebitis  
However, varicosities noted which correlate with patient discomfort. I have therefore conducted a reflux assessment. Please see dedicated lower limb reflux report. Referral to suite 7/vascular consultant advised given patient symptoms.

US Duplex lower limb veins Rt

VENUS

VERIFIED

Attended-27-Oct-2021

ZAKINZAKIN-27-Oct-2021

Venous incomp (RT)

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	R	Reflux
Long saphenous:	R	Reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:

Comments:

Right:

SFJ incompetent.  
LSV incompetent. Runs straight to distal thigh where it feeds into large calibre varicosities of the medial calf. Suitable for VNUS if required.

Case 7

Venous incompet (LT)

SITE	LEFT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	R	Reflux
Saphenopopliteal:	R	Reflux
Mid Calf Short Saphenous:	S	See comments

Comments:

Comments:

Left Leg:

SPJ competent.

Incompetent pelvic veins feeds into LSV at very proximal thigh. LSV incompetent distally, and runs straight within the fascia, feeding into varicosities at mid and distal thigh.

SPJ grossly incompetent.

SSV incompetent. SSV runs straight, within the fascia, to mid calf (~15 cm length), where it feeds into varicosities.

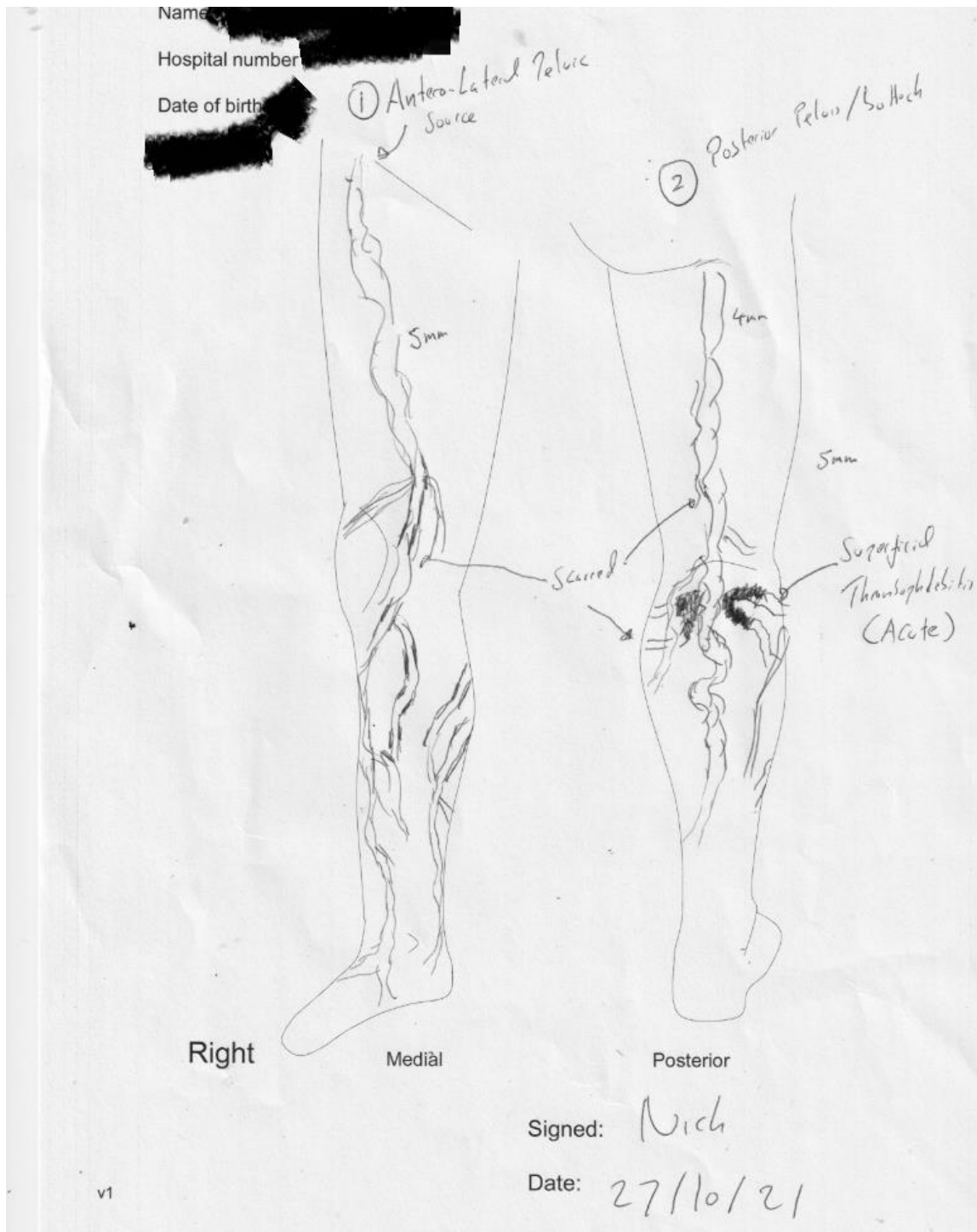
LSV measures 4-5 mm

SSV measures 5 mm

Conclusion:

LSV and SSV both suitable for VNUS.

Case 8



Venous incomp (RT)

SITE	RIGHT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="NR"/>	No reflux
Long saphenous:	<input type="text" value="NR"/>	No reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

Right:

Large calibre tortuous varicose veins in right lower limb. There are 2 sources for these varicosities:

1) Antero-lateral pelvis:

- Tortuous varicosity (5mm diameter) drains down from antero-lateral pelvis down towards medial aspect of thigh, feeding into varicosities from distal thigh level which course towards lateral aspect of calf. Some of these varicosities are heavily scarred, likely due to previous phlebitis.

2) Posterior pelvic/buttock:

- Tortuous varicosity (4mm in diameter) courses down posterior aspect of thigh, mainly feeding into large calibre varicosities at knee crease level. Some of these varicosities are scarred/contain near occlusive chronic thrombus, however some of these varicosities also contain acute occlusive thrombus.

SFJ/LSV and SPJ/SSV are patent and competent.

Sub-optimal assessment of deep veins due to patient body habitus, however where seen the CFV, FV and POPV are patent with no evidence of reflux

Conclusion:

1) NOT suitable for VNUS treatment.

2) 2 main sources of varicosities

3) Acute superficial thrombophlebitis within varicosities of very proximal posterior calf

4) Please see diagram on PACS.

## Case 9

Venous incomp (LT)

SITE	LEFT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="NR"/>	No reflux
Long saphenous:	<input type="text" value="NR"/>	Minor reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

Left:

Pelvic vein feeds into LSV at very proximal thigh.

Minor low velocity reflux below this level. LSV runs straight to proximal calf where it feeds into small calibre varicosities. LSV measures ~4mm

## Case 10

US Duplex lower limb veins Rt

Venous incomp (RT)

VERIFIED-Attended-29-Sep-2021-ZAKINZAKIN-29-Sep-2021

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	MR	Minor reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:

Comments:

Right:

Pelvic vein feeds into LSV at very proximal thigh.

Minor low velocity reflux below this level. LSV runs straight to proximal calf where it feeds into small calibre varicosities. LSV measures ~4mm

## Case 11

US Duplex lower limb veins Rt

Venous incomp (RT)

VERIFIED-Attended-23-Sep-2021-ZAKINZAKIN-23-Sep-2021

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	NR	No reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:

Comments:

No evidence of reflux.

Small calibre superficial branches of LSV seen in lower limb, however no evidence of reflux.

## Case 12

US Duplex lower limb veins Rt

Venous incomp (RT)

VERIFIED-Attended-13-Sep-2021-ZAKIN/ZAKIN-13-Sep-2021

SITE	RIGHT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="R"/>	Reflux
Long saphenous:	<input type="text" value="R"/>	Reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

RIGHT:

SFJ incompetent.

LSV incompetent. LSV runs straight to mid thigh where it feeds into varicosity which courses towards lateral lower limb.

Supine LSV measures 4mm. Suitable for VNUS

## Case 13

US Duplex lower limb veins Lt

Venous incomp (LT)

VERIFIED-Attended-13-Sep-2021-ZAKIN/ZAKIN-13-Sep-2021

SITE	LEFT	
Common femoral:	<input type="text" value="NR"/>	No reflux
Femoral:	<input type="text" value="NR"/>	No reflux
Popliteal:	<input type="text" value="NR"/>	No reflux
Saphenofemoral junction:	<input type="text" value="NR"/>	No reflux
Long saphenous:	<input type="text" value="R"/>	Reflux
Saphenopopliteal:	<input type="text" value="NR"/>	No reflux
Mid Calf Short Saphenous:	<input type="text" value="NR"/>	No reflux

Comments:

Comments:

LEFT:

Incompetent pelvic source veins reflux into LSV at proximal thigh level.

LSV incompetent distally. LSV runs straight feeding into veins at distal thigh and calf.

Supine LSV measures 4mm, suitable for VNUS if required.



## Case 14

US Duplex lower limb veins Lt	VERIFIED--Attended-06-Sep-2021--ZAKIN/ZAKIN-06-Sep-2021--
Venous incomp (LT)	
SITE	LEFT
Common femoral:	NR <input type="text"/> No reflux
Femoral:	NR <input type="text"/> No reflux
Popliteal:	NR <input type="text"/> No reflux
Saphenofemoral junction:	R <input type="text"/> Reflux
Long saphenous:	R <input type="text"/> Reflux
Saphenopopliteal:	NR <input type="text"/> No reflux
Mid Calf Short Saphenous:	NR <input type="text"/> No reflux
Comments:	
<u>Comments:</u>	
Left: SFJ incompetent. Reflux into LSV. Runs straight to proximal calf where it feeds into varicosities (minor kink at mid thigh). Suitable for VNUS	

## Case 15

US Duplex lower limb veins Lt	VERIFIED--Attended-26-Aug-2021--ALEXL+ZAKIN/ALEXL-26-Aug-2021--
Venous incomp (LT)	
SITE	LEFT
Common femoral:	NR <input type="text"/> No reflux
Femoral:	NR <input type="text"/> No reflux
Popliteal:	NR <input type="text"/> No reflux
Saphenofemoral junction:	NR <input type="text"/> No reflux
Long saphenous:	NR <input type="text"/> No reflux
Saphenopopliteal:	R <input type="text"/> Reflux
Mid Calf Short Saphenous:	R <input type="text"/> Reflux
Comments:	
<u>Comments:</u>	
Deep veins are patent, with no evidence of proximal DVT.  SFJ and LSV have been ablated, and remain thrombosed throughout the thigh; with no evidence of recanalisation.  Large incompetent perforator vein, with a of diameter 8 mm, drains into SSV at approx. ~3-4 cm below the SPJ (just below knee level). SSV is incompetent below this point and runs straight. With patient in supine, the SSV measure calf 4 mm throughout the calf. Suitable for VNUS if required	

Case 16

US Duplex lower limb veins Lt

Venous incomp (LT)

VERIFIED

Attended-27-Aug-2021

ZAKIN/ZAKIN-27-Aug-2021

SITE	LEFT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	R	Reflux
Long saphenous:	R	Reflux
Saphenopopliteal:	NR	No reflux
Mid Calf Short Saphenous:	NR	No reflux

Comments:

Comments:

LEFT:

Incompetent pelvic vein feeds into SFJ.  
SFJ refluxes directly into:

- 1) incompetent LSV. this runs straight to proximal calf where it feeds into varicosities. LSV measures 4mm.
- 2) incompetent small calibre anterior thigh varicosity

Case 17

US Duplex lower limb veins Lt

Venous incomp (LT)

VERIFIED

Attended-30-Jul-2021

ZAKIN/ZAKIN-30-Jul-2021

SITE	LEFT	
Common femoral:	-	-----
Femoral:	-	-----
Popliteal:	-	-----
Saphenofemoral junction:	-	-----
Long saphenous:	-	-----
Saphenopopliteal:	-	-----
Mid Calf Short Saphenous:	-	-----

Comments:

Comments:

Unable to check for reflux due to patient mobility and tolerance of probe pressure.

Visually, small calibre medial varicosities arise from LSV at mid thigh and from a perforator at proximal calf, however unable to demonstrate if these are a source of reflux.

## Case 18

US Duplex lower limb veins Lt		VERIFIED - Attended-30-Jul-2021 - ZAKIN/ZAKIN-30-Jul-2021	
Venous incomp (LT)			
SITE		LEFT	
Common femoral:	NR	No reflux	
Femoral:	NR	No reflux	
Popliteal:	NR	No reflux	
Saphenofemoral junction:		NR	No reflux
Long saphenous:	NR	No reflux	
Saphenopopliteal:	R	Reflux	
Mid Calf Short Saphenous:	R	Reflux	

Comments:

Comments:

No change compared to previous imaging

Left:

SPJ reflux into SSV. SSV runs straight and incompetent to mid calf where it feeds into varicosities. SSV measures 3-4mm and is scarred in proximal calf.

## Case 19

US Duplex lower limb veins Lt		VERIFIED - Attended-28-Oct-2021 - ZAKIN/ZAKIN-28-Oct-2021	
Venous incomp (LT)			
SITE		LEFT	
Common femoral:	NR	No reflux	
Femoral:	NR	No reflux	
Popliteal:	NR	No reflux	
Saphenofemoral junction:		NR	No reflux
Long saphenous:	NR	No reflux	
Saphenopopliteal:	NR	No reflux	
Mid Calf Short Saphenous:	NR	No reflux	

Comments:

Comments:

Left:

No evidence of reflux

CFV, FV and POPV patent with no evidence of DVT.

Very minor non occlusive scarring noted in SSV at very proximal calf.

## Case 20

US Other Examination

VERIFIED—Attended-30-Oct-2021—ZAKIN/ZAKIN-30-Oct-2021—

VNUS

RIGHT:

U/S examination demonstrates SFJ/LSV reflux. LSV runs straight to proximal calf where it feeds into varicosities. LSV large in calibre but heavy web-like scarring throughout.

VNUS attempted, however procedure abandoned due to heavy scarring.

(No evidence of DVT post procedure)

## Case 21

US Duplex lower limb veins Lt

VERIFIED—Attended-29-Oct-2021—ZAKIN/ZAKIN-29-Oct-2021—

Venous incomp (LT)

SITE	LEFT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	R	Reflux
Long saphenous:	A	Absent / not detected
Saphenopopliteal:	A	Absent / not detected
Mid Calf Short Saphenous:	S	See comments

Comments:

Comments:

Left:

Recurrent small calibre SFJ.

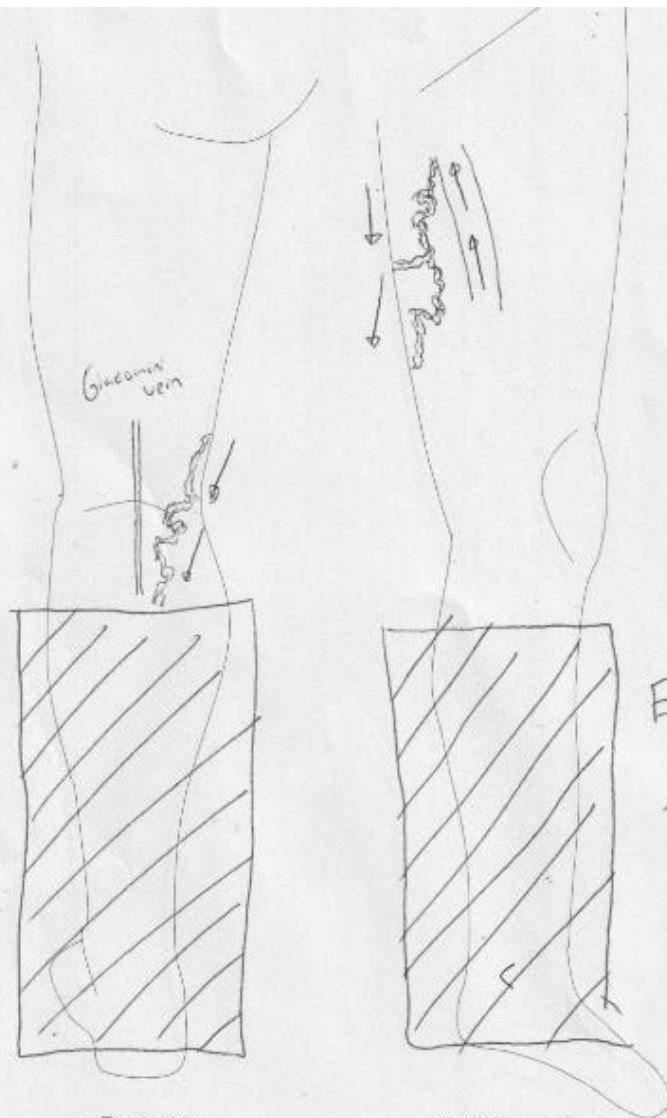
This feeds reflux directly into a very small calibre tortuous varicosity which courses down the medial aspect of the thigh and towards the posterior aspect of the calf.

LSV absent/previously treated.

Giacomini vein patent where seen.

Unable to image calf due to extensive dressings/ulceration of calf.

Please see diagram on PACS



Posterior

Medial

Left

Extensive Dressing  
+ ulceration  
Throughout Calf

Signed: Nick. Z

Date: 29/10/21

## Case 22

US Duplex lower limb veins Rt  
Venous incomp (RT)

VERIFIED-Attended-30-Oct-2021-ZAKIN/ZAKIN-30-Oct-2021-

SITE	RIGHT	
Common femoral:	NR	No reflux
Femoral:	NR	No reflux
Popliteal:	NR	No reflux
Saphenofemoral junction:	NR	No reflux
Long saphenous:	S	See comments
Saphenopopliteal:	S	See comments
Mid Calf Short Saphenous:	S	See comments

Comments:

### Comments:

RIGHT:

Patient scanned prior to VNUS:

SPJ incompetent.

Reflux into SSV, which runs straight for ~1cm to very proximal calf, where it feeds into small calibre varicosities. Distally, the SSV is small in calibre and heavily scarred.

Reflux also contributed by incompetent perforator at distal posterior thigh, which refluxes into giacomini vein. Proximally, the giacomini is large in calibre and incompetent (likely siphon effect)

VNUS performed by [REDACTED]

VNUS successfully performed within giacomini vein from distal thigh to proximal thigh.

No evidence of DVT post procedure.

## Case 23

US Other Examination

VERIFIED-Attended-30-Oct-2021-ZAKIN/ZAKIN-30-Oct-2021-

VNUS

Right:

U/S scan demonstrates SFJ/LSV reflux. LSV runs straight to proximal calf where it feeds into varicosities

VNUS of LSV to 2.7cm of SFJ.

No evidence of DVT post procedure.

## Case 24

US Other Examination

VERIFIED - Attended-30-Oct-2021 - ZAKIN/ZAKIN-30-Oct-2021

LEFT:

Scan prior to VNUS demonstrates SFJ/LSV reflux. LSV runs straight to proximal calf where it feeds into medial calf varicosities.

LSV treated to 3.6cm from SFJ.

No evidence of DVT post procedure.

## Case 25

US Other Examination

VERIFIED - Attended-30-Oct-2021 - ZAKIN/ZAKIN-30-Oct-2021

VNUS

Left:

U/S examination demonstrates SFJ/LSV reflux. LSV runs straight to distal thigh where it feeds into varicosities. LSV however too small (1.3mm), scarred and tortuous to perform VNUS. Procedure abandoned.