

Ankle-Brachial Index all you have time for?

Our **Vascular Lab** lets you do **more!**

With our parallel testing you have time to do a thorough investigation.





Case: Diabetic patient with non-healing ulcer on right foot.

Parallell testing in less than 35 minutes.

-5 MINUTES

- Enter patient information or automatically import via DICOM worklist.
- Select Examination.
- Enter clinical history.

5-10 MINUTES

- ► Attach tcpO₂ electrodes around the wound.

10-25 MINUTES

- ► Start tcpO, baseline recording, 15 minutes.
- ► In parallel, perform ankle pressure and toe pressure.
- ► Perform left and right PVR if needed.

25-35 MINUTES

- ► Move laser Doppler probes closer to the wound, start

IN 35 MINUTES

You have now completed a bilateral, distal arterial investigation of the macrocirculation as well as an evaluation of the microcirculation by performing the following tests:

- ► Ankle pressure ABI
- ► Toe pressure TBI

- ► Pulse Volume Recording PVR



Distal circulatory test

Bilateral investigation of the arterial circulation in the legs using the Multi-Channel Vascular Lab PeriFlux System 5000.

Date	12/12/2011	Dep	Vascular Lab
Patient	Patient, Patient	ID	0123456

Anamnesis

Diabetes Insulin intake Yes Smoker 100 pack/year Lung disease 125 Arm blood pressure Reference arm



Reference values		
ABI	1,40 - 0,90	
ТВІ	≥ 0,70	
Ankle pressure	≥ 70 mmHg	
Toe pressure	≥ 50 mmHg	
TcpO ₂ (baseline)	≥ 30 mmHg	
Tissue response to heat	≥ + 150%	

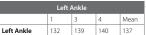
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Right Ankle 184 186 187

Toe- and Ankle Pressure

Left Toe					
	1	3	4	Mean	
Left Toe	40	40	38	39	





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ТВІ	
(Arm)	Mean
Right Toe	0.10

Left Toe

ADI		
(Arm)	Mean	
Right Ankle	1.5	
Left Ankle	1.1	

Microcirculation

tcpO2 LEFT					
BL	Leg low.	02			
58	61	117			
	4%	100%			
	BL 58	BL Leg low. 58 61			

Tissue response to heat LEFT			
	Baseline	Heat.	
LD probe LEFT	6	54	
LD probe LEFT, %	-	774%	



tcpO2 RIGHT				
	BL	Leg low.	02	
tcpO2 RIGHT	0	48	54	
tcpO2 RIGHT, %	-	-	-	

Tissue response to heat RIGHT				
	Baseline	Heat.		
LD probe RIGHT	15	21		
LD probe RIGHT, %	-	42%		



Get the big picture of the limb circulation.

Combine macrovascular tests with microvascular. Indicate measuring sites in color photo. Present data in tables and automatically calculate indices. Include medical history, data from other exams and tables with reference values.

What vascular tests can you do with a Vascular lab PeriFlux System 5000

ANKLE PRESSURE - ABI

TOE PRESSURE - TBI

"Trust ABI when low but not when high." 1 Combine with ABI to get a more accurate assessment of the severity of PAD in patients with diabetes, CLI and end-stage renal disease.^{1,2,3} Laser Doppler is used for detection, which has proven sensitive also at low pressures.4 Local heating at ischemic feet.

Patients with CLI and diabetic foot ulcers commonly also have impaired microvascular function. tcpO₂ is recommended for further risk stratification and wound

TISSUE RESPONSE TO LOCAL HEATING

Gives valuable information about the status of the microcirculation.⁵ Reflects the endothelial function as a response to local heating.6

PVR

Use the pressure unit to visualize the arterial pulsations at different positions and localize significant occlusive lesions. Display curves in the report for evaluation.^{1,3}

SEGMENTAL PRESSURES

Position appropriate cuffs at desired sites and obtain bilateral pressure values. The laser Doppler probe used for detection is positioned on the toe tip throughout the

SPP

of the skin microcirculation.7

PeriFlux System 5000 Vascular Lab – Common configurations









BASIC VASCULAR LAB

MULTI-CHANNEL VASCULAR LAB

BI-LATERAL TOE PRESSURE SYSTEM

TRANSCUTANEOUS OXYGEN

Diagnostic value	Advanced PAD diagnosis including micro- and macrocirculation. Accurate wound healing and amputation level assessments.	Advanced PAD diagnosis including micro- and macrocirculation. Accurate wound healing and amputation level assessments.	Extended macrocirculatory PAD assessment including toe pressures/TBI as well as ABI, segmental pressures and PVR.	Well established microvascular assessment for wound healing potential, amputation level determination, HBO evaluation and more.
	All functionalities in a compact system.	Perfect for the high volume environment.	Complete solution for distal pressures.	Ideal for Wound Care and Hyperbaric clinics.
	One leg at the time. One site $tcpO_2$.	Both legs and reference arm simultaneously. Several sites $tcpO_2$.	Bilateral pressure assessment. Reference arm value entered separately.	Flexible number of sites.
Toe/Ankle Pressure*	\checkmark	\checkmark	\checkmark	-
ABI/TBI	\checkmark	\checkmark	✓	-
PVR	\checkmark	\checkmark	\checkmark	-
Segmental Pressures	\checkmark	\checkmark	✓	-
tcp0 ₂	✓	✓	-	4 channels per main unit. Several main units may be connected.
SPP	✓	✓	\checkmark	-
Tissue response to local heating	1 site simultaneously	2 sites simultaneously	2 sites simultaneously	-

st To simplify measurement in cold ischemic feet, all described configurations include local heating at the measurement point.

Due to its modular design, other configurations are possible. Please contact Perimed for more information The PeriFlux System 5000 Vascular lab is operated using PSW ExM software. PSW ExM is DICOM compatible

REFERENCES:

- International Consensus on the Diabetic Foot and Practical Guidelines on the Management and Prevention of the Diabetic Foot, International Working Group on the Diabetic Foot, 2012
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- 6. Kellogg DL, Jr. In vivo mechanisms of cutaneous vasodilation and vasoconstriction in humans during thermoregulatory challenges. J Appl Physiol 2006;100:1709-1718.
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