

OVERVIEW ASSESSMENT

Visit Date:
Visit Time:

Patient Name:

Gender: Female Height: 5' 4"
DOB: Weight: 161 Lbs
Age: 67 BMI: 27.5

Physician Name:

Clinic or Hospital:
Address:

Referral:

VASCULAR ASSESSMENT

BLOOD PRESSURE

PRE HYPERTENSION

ARTERIAL STIFFNESS

BORDERLINE RANGE

ESTIMATED CASP

NORMAL RANGE

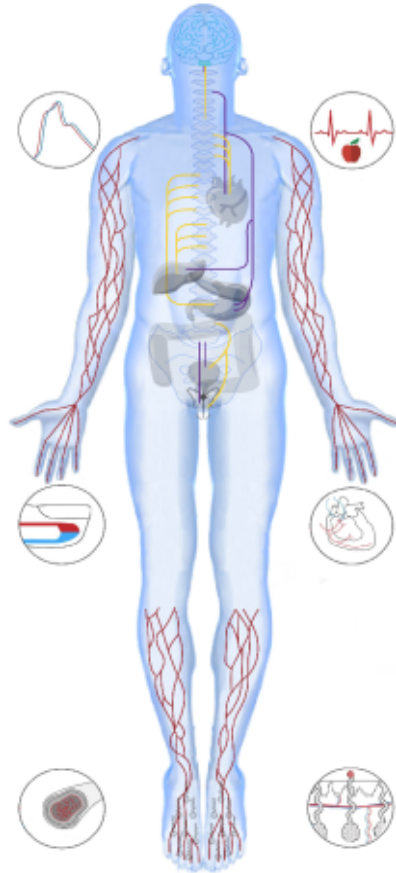
ENDOTHELIAL FUNCTION

SEVERE IMPAIRMENT

ANKLE BRACHIAL INDEX

NORMAL RANGE

CASP = Central Aortic Systolic Pressure



LIFESTYLE ASSESSMENT

ESTIMATED BODY COMPOSITION

OVER WEIGHT

VITAL SIGNS

NORMAL RANGE

EXERCISE CAPACITY

GOOD

AUTONOMIC ASSESSMENT

CARDIAC AUTONOMIC

VASOVAGAL S.

MICROCIRCULATORY RESPONSE

NORMAL RANGE

SWEAT RESPONSE

BORDERLINE

ASSESSMENTS COLOR CODE

■ NORMAL RANGE ■ INITIAL STEP 1 / ACCEPTABLE ■ INITIAL STEP 2 / BORDERLINE ■ DEFINED ■ SEVERE

CLINICAL CONTEXT

Tingling in the toes
Numbness
Hypertension

CMR SCORE

65 %

SCORE 0% - 100% *

CMR COLOR CODE

■ SCORE \geq 80% | Low risk Profile
■ SCORE \geq 60% and $<$ 80% | Borderline Risk Profile
■ SCORE $<$ 60% and \geq 40% | Moderate Risk Profile
■ SCORE $<$ 40% | High Risk Profile

Physician's Signature

CMR =Cardiometabolic Risk

DISCLAIMER: All results should be considered within the clinical context of the patient's, case, history, symptoms, known diagnosis, findings from other diagnostics studies, current medications, treatment plan and therapies. The interpretation of the results is the responsibility of the medical doctor.

OXI_W REPORT

CARDIAC AUTONOMIC ASSESSMENT

Visit Date:
Visit Time:

Patient Name:			
Gender:	Female	Height:	5' 4"
DOB:		Weight:	161 Lbs
Age:	67	BMI:	27.5

Physician Name:
Clinic or Hospital:
Address:
Referral:

MARKERS	DESCRIPTION	RESULT	RANGES (Units)
HRV ANALYSIS BASELINE			
<u>HRV TOTAL POWER</u>	It estimates the overall autonomic homeostatic response at rest. Studies show that a very low total power result is associated with chronic diseases.	1545 NORMAL	> 800 (ms ²)
<u>SDANN</u>	It estimates both sympathetic and parasympathetic activities. Studies show that a very low SDANN response is associated with exercise intolerance.	67 NORMAL	>= 30 (ms)

HRV = Heart rate variability, SDANN= Standard Deviation Average Norm to Norm (NN is the same as RR)

CARTs: PARASYMPATHETIC TESTS

<u>VALSALVA RATIO</u>	It reflects the cardiovagal response to the systolic pressure change. It is a significant marker of parasympathetic baroreceptor reflex sensitivity.	1.12 ABNORMAL	> 1.21 (Ratio)
<u>E/I RATIO</u>	E/I Ratio is calculated from the HRV Ratio during the deep breathing test. It estimates the vagal innervation.	1.14 NORMAL	> 1.08 (Ratio)
<u>K30/15 RATIO</u>	It estimates the cardiac vagal function and identifies Postural Orthostatic Tachycardia Syndrome (POTS) or vagal syndrome risks.	1.16 OVER	>= 1.04 & < 1.14 (Ratio)

K30/15 = RR or SP at 30 seconds divided by RR or SP at 15 seconds, ,CARTs = Cardiac Autonomic Reflex Tests. E/I = Expiration / Inspiration

CARTs: SYMPATHETIC TESTS

Δ <u>SPRS</u>	It estimates the norepinephrine response during the postural change and identifies Orthostatic Hypotension or Orthostatic intolerance risks.	-9 NORMAL	< 10 & > -20 (mmHg)
Δ <u>DPRS</u>	It estimates the epinephrine response during the postural change.	0 NORMAL	< 10 & > -20 (mmHg)

Δ SPRS = Delta Systolic Pressure Response to Standing. **Δ** DPRS = Delta Diastolic Pressure to Standing.

ASSESSMENT

Assessment is conducted from the guidelines of the CAN Subcommittee of the Toronto Consensus Panel statement. The Subcommittee defined criteria for CAN diagnostic and severity.

CARDIAC AUTONOMIC EVALUATION: VASOVAGAL S.

Physician's Signature

VASOVAGAL S. = Vasovagal Syndrome

DISCLAIMER: All results should be considered within the clinical context of the patient's, case, history, symptoms, known diagnosis, findings from other diagnostics studies, current medications, treatment plan and therapies. The interpretation of the results is the responsibility of the medical doctor.

SWEAT-C REPORT

SUDOMOTOR FUNCTION ANALYSIS

Visit Date:
Visit Time:

Patient Name:			
Gender:	Female	Height:	5' 4"
DOB:		Weight:	161 Lbs
Age:	67	BMI:	27.5

Physician Name:
Clinic or Hospital:
Address:
Referral:

■ C-FIBER RESPONSE: SWEAT PEAK (mV)

FOOT	DESCRIPTION	RESULT	RANGES (Units)
<u>LEFT FOOT</u>	Sweat Peak is calculated from the peak amplitude of the galvanic skin response at the positive electrode. It estimates the density of the active cholinergic nerve fiber according to the sweat production response. Our Study shows that a poor sweat peak response is correlated to peripheral neuropathy symptoms.	883	>= 832 & < 1100 (mV)
<u>RIGHT FOOT</u>		794	>= 832 & < 1100 (mV)

■ MICROCIRCULATORY RESPONSE : NO PEAK (mV)

FOOT	DESCRIPTION	RESULT	RANGES (Units)
<u>LEFT FOOT</u>	Nitric Oxide (NO) Peak is calculated from the peak amplitude of the galvanic skin response at the negative electrode. It estimates the postganglionic cholinergic sympathetic vasodilatory response induced by electrical stimulation. Our study shows that the NO peak is associated with retinopathy and Homocysteine lab tests.	883	>= 832 (mV)
<u>RIGHT FOOT</u>		832	>= 832 (mV)

■ ASSESSMENT

i Based on the SweatC clinical studies.

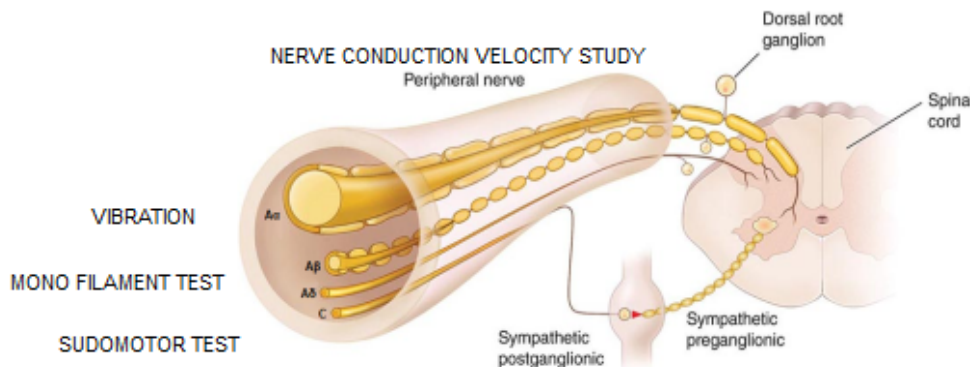
SWEAT RESPONSE EVALUATION: BORDERLINE

MICROCIRCULATORY RESPONSE: NORMAL RANGE

Physician's Signature

i PERIPHERAL DISTAL NEUROPATHY TESTING

Peripheral distal Neuropathy symptoms may be caused by any dysfunction or damage of: Peripheral motor nerve and /or Aα fiber (large fiber) and / or Aβ or Aδ (sensory nerve) and/or C-Fiber (Autonomic cholinergic sympathetic fiber controlling the sudomotor function) Used diagnostic tools:



ENDOTHELIAL FUNCTION AND BLOOD PRESSURE ASSESSMENT

Visit Date:

Visit Time:

Patient Name:

Gender: Female **Height:** 5' 4"

DOB: **Weight:** 161 Lbs

Age: 67 **BMI:** 27.5

Physician Name:

Clinic or Hospital:

Address:

Referral:

ENDOTHELIAL FUNCTION

MARKERS	DESCRIPTION	RESULTS	RANGES / UNITS
<u>STRESS INDEX</u>	Our Clinical study shows that the Stress Index is correlated to the CRP marker of inflammation.	356	< 180 (Vs)
<u>PTG INDEX</u>	Our clinical study shows that PTGi is correlated with the heart's artery blood flow.	21.3	>= 40 (V/s)
<u>PTG TOTAL POWER</u>	Our clinical study shows that PTG-TP has a high specificity and specificity to detect Insulin Resistance measured by HEC.	516	<= 406 (ms2)
<u>PTGVLF INDEX</u>	Our clinical study shows that PTGVLFi is correlated with fibrinogen lab test.	60	<= 32 (V.s/mS)
<u>PTG SD INDEX</u>	Studies using vasodilator medications show that the PTG SD ratio is correlated to the vascular tone.	0.55	<= 0.42 (Ratio)

PTG = Photoplethysmography. VLF = Very Low Frequency, SD = Second

HEC = Hyperinsulinemic Euglycemic Clamp

LARGE ARTERY STIFFNESS

<u>PERIPHERAL Alx</u>	It is calculated from the volume plathysmography, and it estimates the aortic arterial stiffness.	75	< 75 (Ratio)
<u>LEFT baPWV</u>	It is the rate which the blood pressure waves moves down the vessel. It estimates the left leg artery stiffness.	856 NORMAL	< 1550 (cm/s)
<u>RIGHT baPWV</u>	It is the rate which the blood pressure waves moves down the vessel. It estimates the right leg artery stiffness.	887 NORMAL	< 1550 (cm/s)

baPWV = Brachial Ankle Pulse Wave Velocity, Alx = Augmentation Index

ARM BLOOD PRESSURE ANALYSIS

<u>ESTIMATED CENTRAL AORTIC SP.</u>	It estimates the SP at the aorta during the ejection phase using the volume plethysmography analysis.	117 NORMAL	< 126 (mmHg)
<u>DELTA RIGHT / LEFT ARM</u>	It assesses the subclavian or axillary stenosis risk.	5 NORMAL	< 20 (mmHg)

SP = Systolic Pressure.

ASSESSMENT



Based on the 2020 International Society of Hypertension guidelines , our Photoplethysmography Spectral Analysis clinical studies, peer reviews regarding the vasomotion or flowmotion and Photoplethysmography second derivative analysis.

BLOOD PRESSURE EVALUATION: PRE HYPERTENSION

ARTERIAL STIFFNESS EVALUATION: BORDERLINE RANGE

CASP EVALUATION: NORMAL RANGE

ENDOTHELIAL FUNCTION EVALUATION: SEVERE IMPAIRMENT

Physician's Signature

DISCLAIMER: All results should be considered within the clinical context of the patient's, case, history, symptoms, known diagnosis, findings from other diagnostics studies, current medications, treatment plan and therapies. The interpretation of the results is the responsibility of the medical doctor.

LOWER EXTREMITY VASCULAR ASSESSMENT

Visit Date:
Visit Time:

Patient Name:


Gender: Female Height: 5' 4"
DOB: Weight: 161 Lbs
Age: 67 BMI: 27.5

Physician Name:

Clinic or Hospital:
Address:

Referral:

ANKLE BRACHIAL SYSTOLIC PRESSURE



RIGHT ARM <u>SYSTOLIC P.</u> 136 mmHg		LEFT ARM <u>SYSTOLIC P.</u> 131 mmHg
RIGHT PT ARTERY <u>SYSTOLIC P.</u> 152 mmHg <u>SA AMPLITUDE</u> 60 mV/min		LEFT PT ARTERY <u>SYSTOLIC P.</u> 147 mmHg <u>SA AMPLITUDE</u> 64 mV/min
RIGHT DP ARTERY <u>SYSTOLIC P.</u> 147 mmHg <u>SA AMPLITUDE</u> 60 mV/min		LEFT DP ARTERY <u>SYSTOLIC P.</u> 142 mmHg <u>SA AMPLITUDE</u> 64 mV/min

P. = Pressure, PT = Posterior Tibial, DP = Dorsalis Pedis, SA = Spectral Analysis,

SPECTRAL ANALYSIS AMPLITUDE. It is calculated from the spectral analysis of the volume plethysmography recorded from the cuffs during the deflation during the blood pressure measurement at the arms and ankles. It is a marker of the blood flow recovery after artery occlusion.

RIGHT ANKLE BRACHIAL INDEX 1.08 NORMAL	LEFT ANKLE BRACHIAL INDEX 1.04 NORMAL
--	---

ANKLE BRACHIAL INDEX RANGES

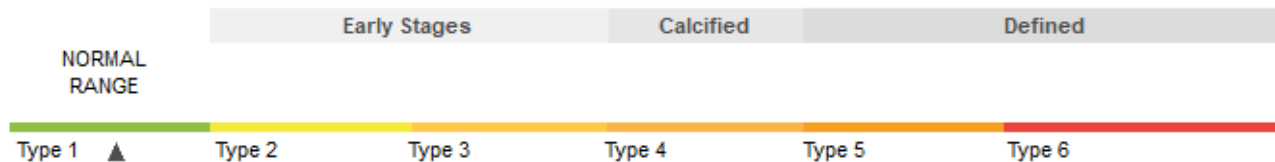


SAAMPLITUDE RANGES



ANKLE BRACHIAL INDEX. It is calculated from the lowest systolic pressure (dorsalis Pedis and Posterior tibial artery) at each ankle divided the highest systolic

PERIPHERAL ARTERY DISEASE (PAD) ASSESSMENT RISK CHART



Physician's Signature

Based on the "Management of Patients with Peripheral Artery Disease" published by the Journal of the American College of Cardiology

DATA MANAGEMENT REPORT

LIFESTYLE ASSESSMENT

Visit Date:
Visit Time:

Patient Name:

Gender: Female **Height:** 5' 4"

DOB: **Weight:** 161 Lbs

Age: 67 **BMI:** 27.5

Physician Name:

Clinic or Hospital:

Address:

Referral:

MARKERS	DESCRIPTION	RESULT	RANGES (Units)
FAT LEVEL			
<u>ESTIMATED FAT MASS</u>	(Fat mass / total weight) * (100)	36 BORDERLINE	<= 34 (%)
<u>BMI</u>	(Weight / Height ²)	27 BORDERLINE	<= 26 (kg/m ²)


BMI = Body Mass Index

VITAL SIGNS			
<u>HEART RATE</u>	Tachycardia at rest can limit the possibility of moderate and vigorous exercise (> 3 METs).	71 NORMAL	> 50 & < 85 (bpm)
<u>SpO2</u>	It is a marker of blood oxygen saturation. A low SpO2 (<=90%) can limit the possibility of moderate and vigorous exercise (> 3 METs).	96 NORMAL	>= 94 (%)
<u>SYSTOLIC PRESSURE</u>	High systolic pressure can limit the possibility of moderate and vigorous exercise (> 3 METs)	131 PRE-HYPERTENSION	<= 130 (mmHg)

HRV EXERCISE CAPACITY			
<u>rMSSD</u>	It estimates parasympathetic system activity. Studies show that a lower rMSSD is associated with a longer exercise recovery.	99 NORMAL	> 35 (ms)
<u>SDANN</u>	It estimates sympathetic and parasympathetic activities. Studies show that a lower SDANN is associated with exercise ir & < nce.	67 NORMAL	>= 30 (ms)
<u>LF/HF</u>	It estimates adrenergic sympathetic system predominance and can be associated with mental stress.	0.86 NORMAL	> 0.6 & < 2 (ratio)

HRV = Heart Rate Variability, rMSSD = Root Mean Square Successive Difference, SP = Systolic Pressure.
SDANN = Standard Deviation Average Normal to Normal.

ASSESSMENT

 Based on the Bioimpedance analysis, vital signs and Heart rate Variability peer reviews

BODY COMPOSITION EVALUATION: OVER WEIGHT

VITAL SIGNS: NORMAL RANGE

EXERCISE CAPACITY MARKERS EVALUATION: GOOD

Physician's Signature

DISCLAIMER: All results should be considered within the clinical context of the patient's, case, history, symptoms, known diagnosis, findings from other diagnostics studies, current medications, treatment plan and therapies. The interpretation of the results is the responsibility of the medical doctor.

DATA MANAGEMENT REPORT

MAIN MARKERS OVERVIEW

Visit Date:
Visit Time:

Patient Name:

Gender: Female **Height:** 5' 4"

DOB: **Weight:** 161 Lbs

Age: 67 **BMI:** 27.5

Physician Name:

Clinic or Hospital:

Address:

Referral:

	MARKERS	RESULT	RANGE (Unit)	DESCRIPTION
E N D O T H E L I A L	PTG TOTAL POWER	516	<= 406 (ms ²)	High Sensitivity and Specificity to detect Insulin Resistance.
	STRESS INDEX	356	< 180 (Vs)	Correlated to the CRP Lab Test.
	PTG Index	21.3	>= 40 (Vs)	Correlated to the heart artery blood flow.
	PTGVLF Index	60	<= 32 (Vs/microS)	Correlated to the fibrinogen lab test,
	SDPTG	0.55	<= 0.42 (Ratio)	Correlated to the Vascular Tone
B P	ARM SYSTOLIC PRESSURE	131	<= 130 (mmHg)	Highest blood pressure
	ARM DIASTOLIC PRESSURE	78	<= 85 (mmHg)	Lowest blood pressure
	ESTIMATED CASP	117	< 126 (mmHg)	Estimated Central Aortic Systolic Pressure.
P A D	LEFT ABI	1.04	>= 1.0 and < 1.30 (Ratio)	Left Ankle lowest pressure / arm highest pressure.
	RIGHT ABI	1.08	>= 1.0 and < 1.30 (Ratio)	Right Ankle lowest pressure / arm highest pressure.
	LEFT ANKLE SA AMPLITUDE	64	>= 60 (mV/min)	Left Ankle blood flow recovery.
	RIGHT ANKLE SA AMPLITUDE	60	>= 60 (mV/min)	Right Ankle blood flow recovery.
C A N	SDANN	67	>= 30 (mS)	A Low SDANN is associated with exercise intolerance.
	HRV TOTAL POWER	1545	> 800 (ms ²)	Overall homeostatic response at rest.
	ΔDPRS	0	< 10 and > -20 (mmHg)	Epinephrine response during the postural change.
	ΔSPRS	-9	< 10 and > -20 (mmHg)	Norepinephrine response during the postural change.
	VALSALVA RATIO	1.12	>= 1.21 (Ratio)	Marker of the parasympathetic baroreceptor reflex sensitivity.
	E/I RATIO	1.14	> 1.15 (Ratio)	Estimated vagal innervation.
	K3015 RATIO	1.16	>= 1.04 and < 1.14 (Ratio)	Estimated cardiac vagal function.
S U D O	LEFT NO PEAK	883	>= 832 (mV)	Left foot skin microcirculatory response.
	RIGHT NO PEAK	832	>= 832 (mV)	Right foot skin microcirculatory response.
	LEFT SWEAT PEAK	883	>= 832 and < 1100 (mV)	Left foot skin sweat production response.
	RIGHT SWEAT PEAK	794	>= 832 and < 1100 (mV)	Right foot skin sweat production response.
	ESTIMATED FAT MASS	36	< 34 %	(Fat mass / total weight) * (100)
L I F E S T Y L E	HEART RATE	71	> 50 and < 85 (bpm)	Heart beats per minute.
	SPO2	96	>= 94 %	Blood oxygen saturation.
	rMSSD	99	> 35 mS	A low rMSSD is associated with a longer exercise recovery.
	LF/HF	0.86	> 0.6 and < 2.0 (Ratio)	Estimated adrenergic sympathetic system activity at Rest.

■ NORMAL
 ■ ACCEPTABLE
 ■ BORDERLINE
 ■ ABNORMAL
 ■ SEVERE

COMMENTS

Visit Date:

Visit Time:

Patient Name:

Gender: Female

Height: 5' 4"

DOB:

Weight: 161 Lbs

Age: 67

BMI: 27.5

Physician Name:

Clinic or Hospital:

Address:

Referral:

- Mild cardiometabolic risk has been detected.

- ENDOTHELIAL FUNCTION EVALUATION: SEVERE IMPAIRMENT
PTGTP Marker correlated to Insulin resistance is increased.
PTGI marker correlated to heart artery blood flow is moderately reduced.
PTGVLFi marker correlated to fibrinogen level is mildly increased.
Stress Index marker correlated to C-Reactive Protein is moderately increased.
SDPTG marker correlated to the small artery tone is moderately increased.

- ARTERIAL STIFFNESS EVALUATION: BORDERLINE RANGE

- BLOOD PRESSURE EVALUATION: PRE HYPERTENSION

- CASP EVALUATION: NORMAL RANGE

- ANKLE BRACHIAL INDEX EVALUATION: NORMAL RANGE

- CARDIAC AUTONOMIC EVALUATION: VASOVAGAL S.
- Parasympathetic Responses evaluation:
Possibility of vasovagal syndrome. Over vagal response at standing.
Over Cardiovagal regulation at standing.
Moderate parasympathetic baroreceptor sensitivity.

- SWEAT RESPONSE EVALUATION: BORDERLINE
Low sudomotor response in right foot. C-Fiber density mildly decreased.
We suggest alpha-lipoic acid supplement.

- MICROCIRCULATORY RESPONSE: NORMAL RANGE

- LIFESTYLE EVALUATION: GOOD LIFESTYLE

- BODY COMPOSITION EVALUATION: OVER WEIGHT
We suggest following a weight loss program plan.
Low carbohydrates and low trans fat diet may help.

- VITAL SIGNS: NORMAL RANGE

- EXERCISE CAPACITY MARKERS EVALUATION: GOOD

Physician's Signature

TBL-ABI / OXI_W REPORT

BLOOD PRESSURE AND OXIMETER WAVEFORM ANALYSIS

Visit Date:
Visit Time:

Patient Name:

Gender: Female Height: 5' 4"

DOB: Weight: 161 Lbs

Age: 67 BMI: 27.5

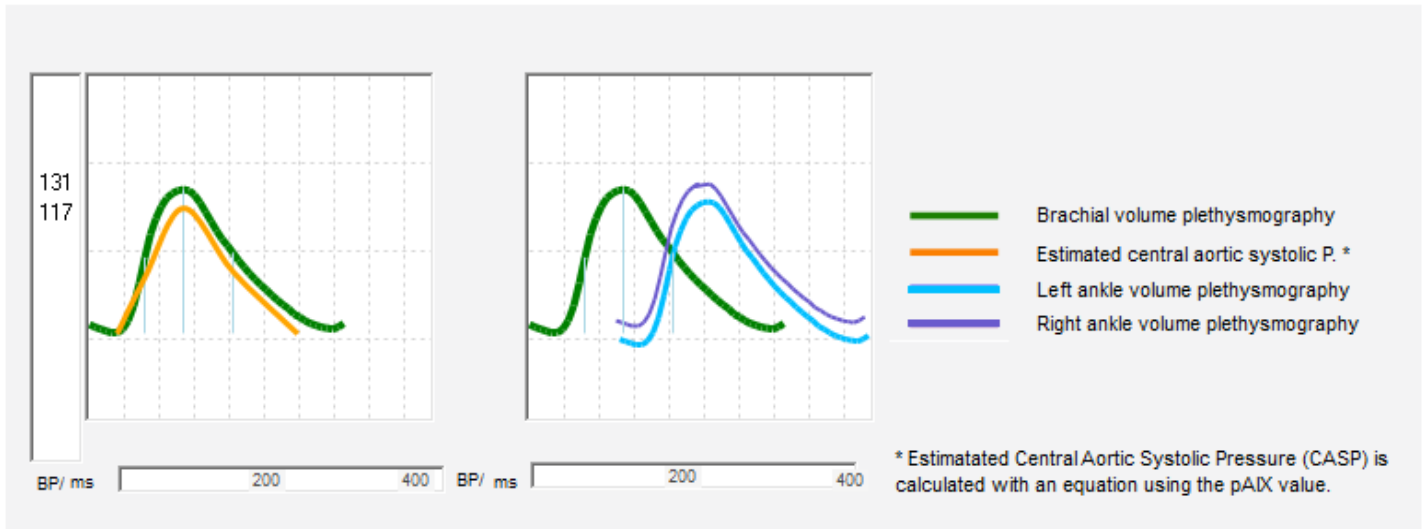
Physician Name:

Clinic or Hospital:

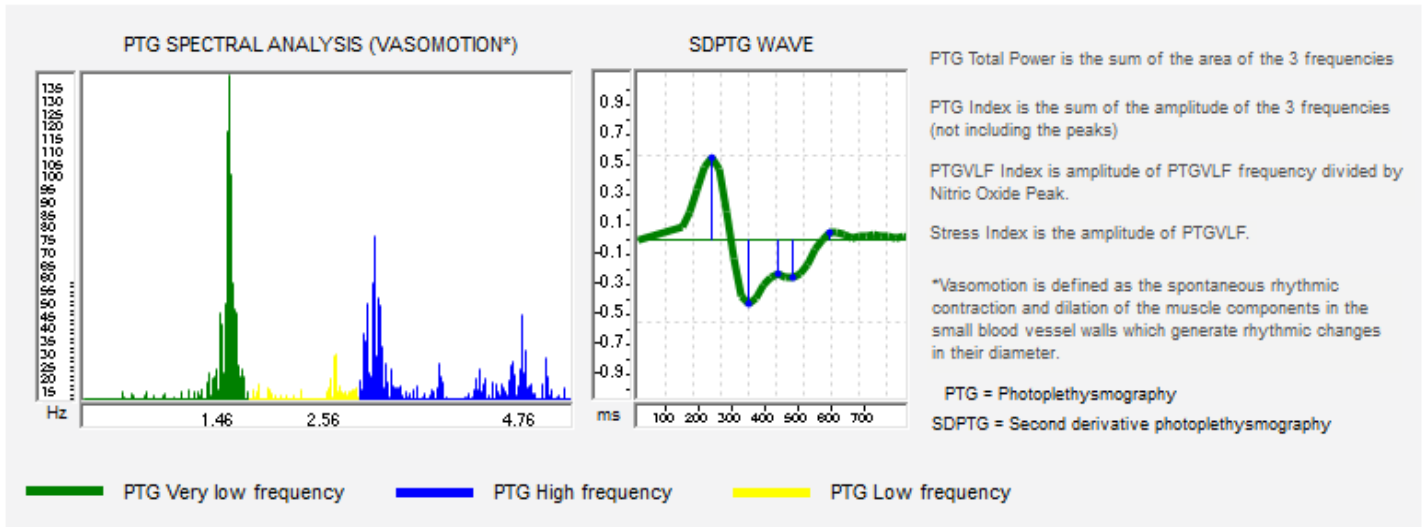
Address:

Referral:

GRAPHICS OF VOLUME PLETHYSMOGRAPHY ANALYSIS



GRAPHICS OF PHOTOPLETHYSMOGRAPHY ANALYSIS



DISCLAIMER: The interpretation of the graphics is the responsibility of the medical doctor.

TBL-ABI REPORT

ANKLE VOLUME PLETHYSMOGRAPHY SPECTRAL ANALYSIS

Visit Date:
Visit Time:

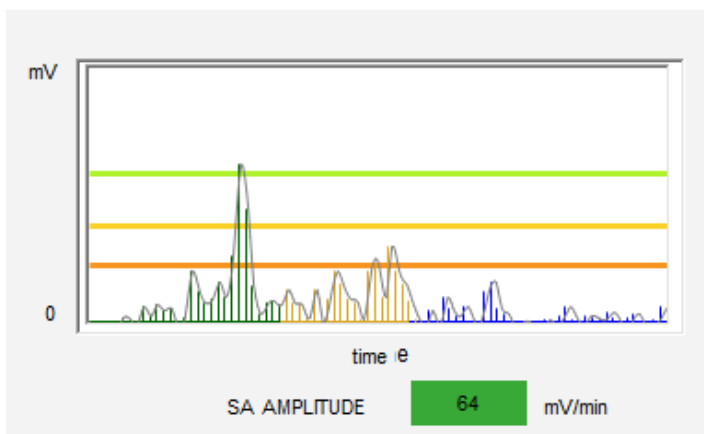
Patient Name:

Gender: Female Height: 5' 4"
DOB: Weight: 161 Lbs
Age: 67 BMI: 27.5

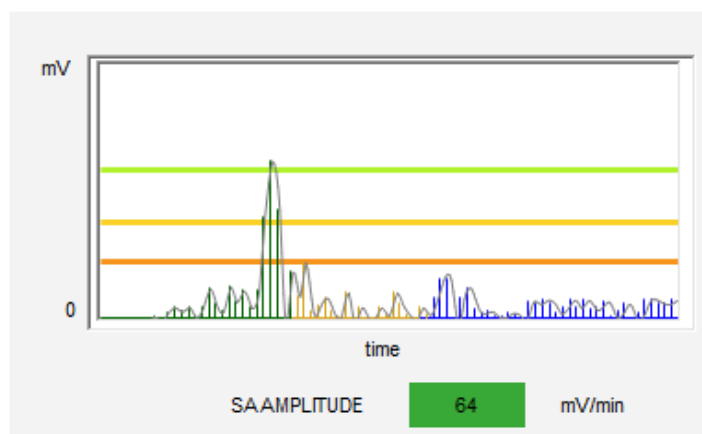
Physician Name:

Clinic or Hospital:
Address:
Referral:

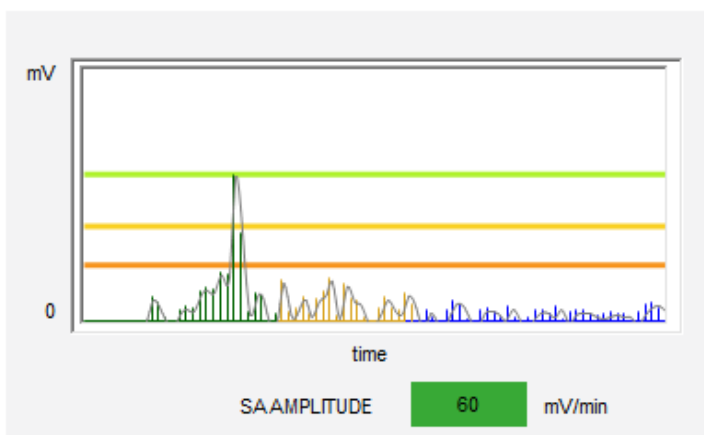
LEFT ANKLE DP ARTERY



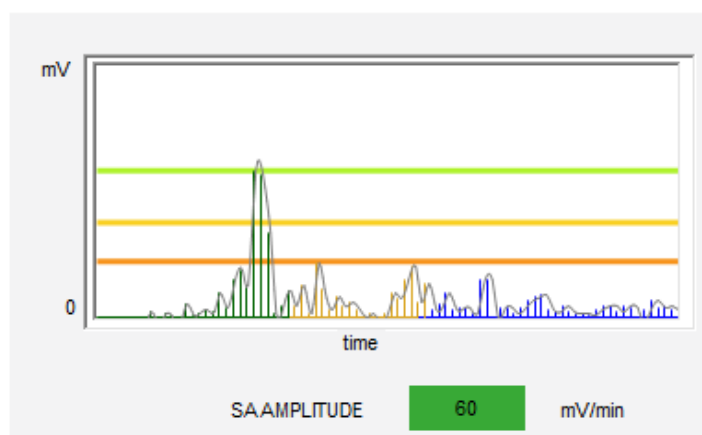
LEFT ANKLE PT ARTERY



RIGHT ANKLE DP ARTERY



RIGHT ANKLE PT ARTERY



SAAMPLITUDE RANGES 60 40 25

DP = Dorsal Pedis, PT = Posterior Tibial, SA = Spectral Analysis (of the volume plethysmography).

SPECTRAL ANALYSIS AMPLITUDE. It is calculated from the spectral analysis of the volume plethysmography recorded from the cuffs during the deflation during the blood pressure measurement at the arms and ankles. It is a marker of the blood flow recovery after artery occlusion.

DISCLAIMER: The interpretation of the graphics is the responsibility of the medical doctor.

TBL-ABI REPORT

ABI VOLUME PLETHYSMOGRAPHY

Visit Date:
Visit Time:

Patient Name:

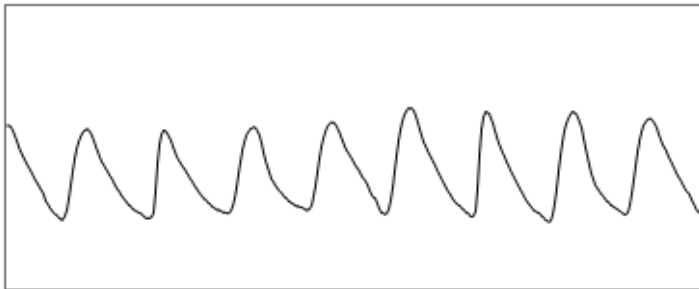
Gender: Female Height: 5' 4"
DOB: Weight: 161 Lbs
Age: 67 BMI: 27.5

Physician Name:

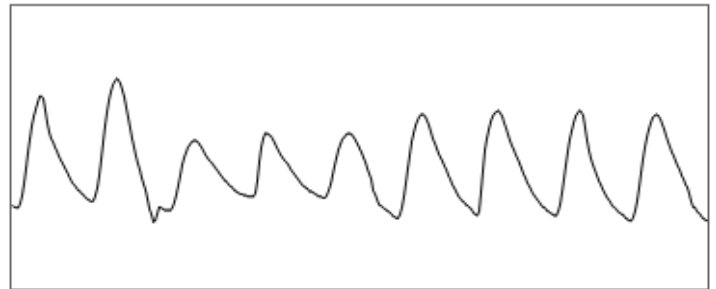
Clinic or Hospital:
Address:

Referral:

RIGHT ARM BRACHIAL ARTERY VPR



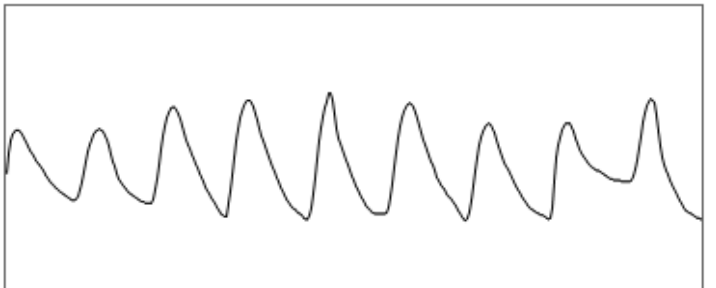
LEFT ARM BRACHIAL ARTERY VPR



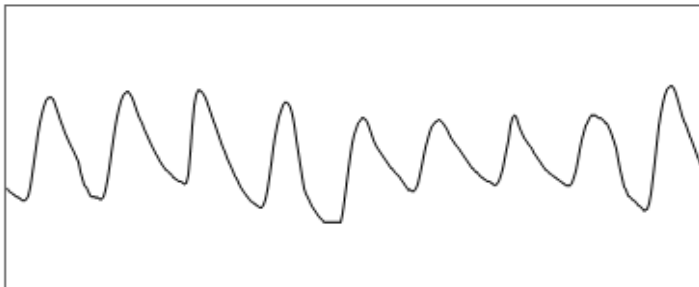
RIGHT ANKLE DP ARTERY VPR



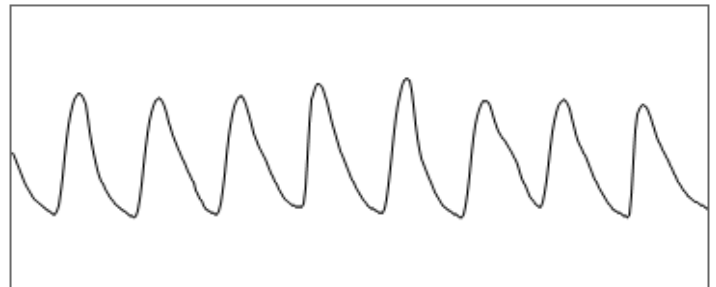
LEFT ANKLE DP ARTERY VPR



RIGHT ANKLE PT ARTERY VPR



LEFT ANKLE PT ARTERY VPR



VPR = Volume Plethysmographic Record, DP= Dorsal Pedis, PT= Posterior Tibial.

Device: TBL ABI, Method: Volume Plethysmography using air pressure cuffs.

DISCLAIMER: The Interpretation of the graphics is the responsibility of the medical doctor.

SWEAT-C / OXI_W REPORT

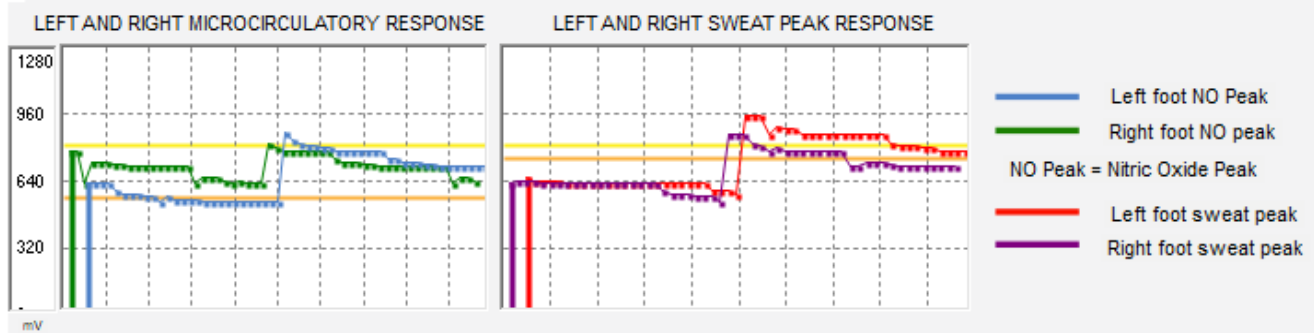
AUTONOMIC NERVOUS SYSTEM RECORD GRAPHICS

Visit Date:
Visit Time:

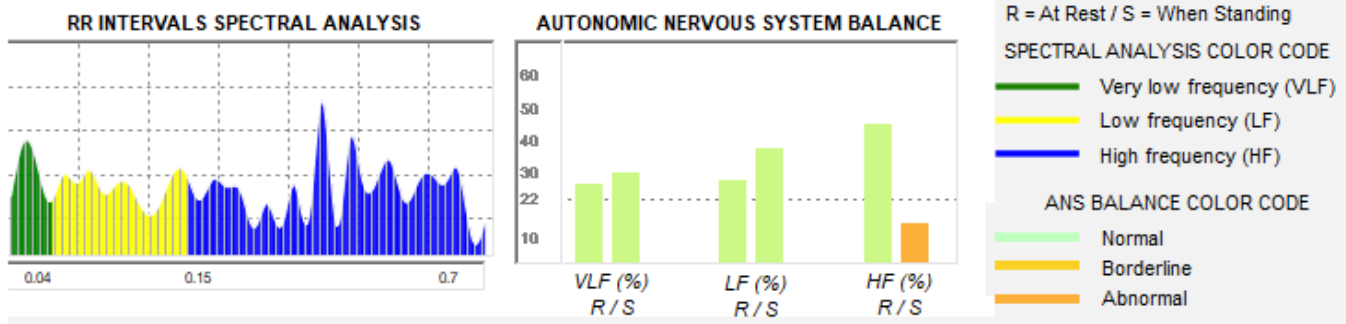
Patient Name:
Gender: Female **Height:** 5' 4"
DOB: **Weight:** 161 Lbs
Age: 67 **BMI:** 27.5

Physician Name:
Clinic or Hospital:
Address:
Referral:

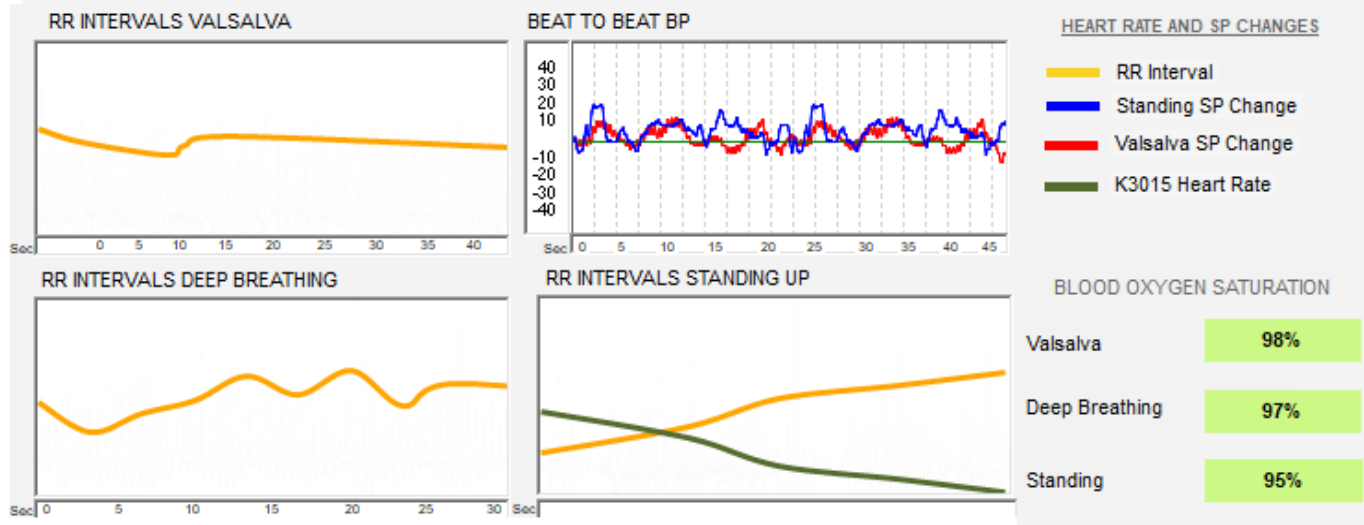
SUDOMOTOR RESPONSE RECORDS



HEART RATE VARIABILITY (HRV) ANALYSIS



CARDIAC AUTONOMIC REFLEX TESTs (CARTs) RECORDS



DISCLAIMER: The interpretation of the graphics is the responsibility of the medical doctor.