

VASCULAR FUNCTION ASSESSMENT

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| Patient Name: Gender: Female DOB: 2/23/1967 Age: 50 | HR: 84 Height 5' 5" Weight 247 Lbs BMI: 41.1 | Physician Name: Clinic or Hospital: Abex Medical Center Address: Las Vegas, Nevada 89106 Referral: | | |
|--|---|--|--|--|
| CLINICAL CONTEXT | | | | |

Checkup

UPPER EXTREMITY ARTERY

| Central Aortic Systolic Pressure (mmHg) Marker of the pressure at the root of the heart. | | | 101 | | - 119 - | 123 | | |
|---|-----------------------|------------|-----|------------------------|-----------------------|--------------------|-----|--|
| Peripheral A Marker of aortic sti | • | n Index (% | 6) | 50 | | 75 💻 | 100 | |
| Brachial BP. | SYSTOLIC P. (mmHg) | 145 | | OLIC P. nHg) | 58 | PULSE P. (mmHg) | 0/ | |

| ENDOTHELIAL FUNCTION | PTG stands | for photopleth | ysmogr | aphy. | | |
|---|------------|----------------|--------|------------|------|--------|
| PTG Index (V.s) Marker of homeostasis. | 41.8 | | 25 | | 40 | NORMAL |
| Stress Index (%) Marker of inflammation. | 210 | | 180 | BORDERLINE | 500 | |
| PTG Second Derivative Index (ratio) Marker of arterial tone. | 0.27 | NORMAL | 0.42 | | 0.55 | |

| LOWER EXTREMITY ART | ERY | ba stands | ba stands for brachial ankle and NC for Non-Compressible. | | | | |
|--|-----|------------------------|---|----------------------------------|---|--|--|
| Left Ankle Brachial II Marker of of the left leg large arte | | 1.19 | | 0.90 1.0 NORMAL | _ | | |
| Right Ankle Brachial Marker of of the right leg large ar | | ⁾⁾ 1.12 | | 0.90 1.0 NORMAL 1.39 = | | | |
| ba Pulse Wave Veloc Marker of lower extremity artery | | 964 | | L 1550 > 1800 > | _ | | |
| Left Ankle BP. (mmHg) | 171 | DIASTOLIC P. (mmHg) | 73 | Left Diastolic ABI (ratio) 1.26 | 6 | | |
| Right Ankle BP. SYSTOLIC P. (mmHg) | 162 | DIASTOLIC P. (mmHg) | 61 | Right Diastolic ABI (ratio) 1.05 | 5 | | |

BP stands for blood pressure and P. for pressure.

DISCLAIMER: All results should be considered within the clinical contextof 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.



AUTONOMIC NERVOUS SYSTEM ASSESSMENT

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|--|--|--|
| CLINICAL CONTEXT | | |

Checkup

CARDIAC AUTONOMIC REGULATION

| Total Power (ms2) Marker of overall ANS activity at rest. | 1001 | 500 | | 780 | NORMAL |
|---|------|---------|------------|-----|--------|
| High Frequency (ms2) Marker of parasympathetic activity at rest. | 171 | 150 | BORDERLINE | 220 | |
| Low Frequency / High Frequency (ratio) Marker of ANS balance. | 2.49 | 2 | BORDERLINE | 3.5 | |
| SDANN (ms) Marker of sympathetic / parasympathetic function. | 33 | 25 | BORDERLINE | 40 | |

CARDIOVAGAL REFLEX TESTS RR stands for Regular to Regular time between each heart beat. RR / SP Valsalva Ratio NORMAL 1.08 0.85 0.95 Marker cardiovagal response to BP. Expiration / Inspiration Ratio Marker of cardiovagal innervation. NORMAL 1.21 1.15 1.18 NORMAL K30/15 Ratio 0.99 1.04 1.10 Marker of cardiac function. SYMPATHETIC REFLEX TESTS SP stands for systolic pressure.

| SP Valsalva Recovery Sympathetic response during Valsalva test. | 1.02 | 0.85 | 0.95 | |
|---|------|------|------|--|
| SP K3015 Recovery Sympathetic response during change of posture. | 0.97 | 0.85 | 0.95 | |

| Sweat Peak (mV) Marker of the active sweat gland nerve function. | 730 | ABNORMAL | 768 | 1000 | |
|---|-----|----------|-----|----------|---|
| NO Peak (mV) Marker of the skin foot microcirculation. | 402 | ABNORMAL | 768 | 1000 | _ |

NO stands for nitric oxide.

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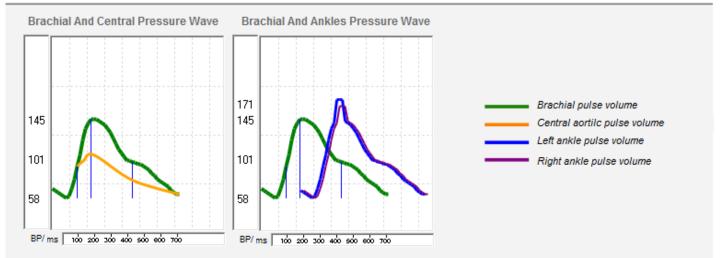


VASCULAR FUNCTION ASSESSMENT GRAPHICS

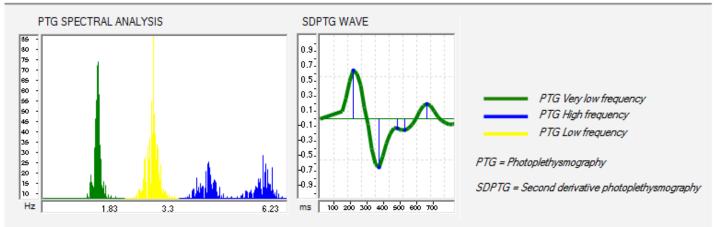
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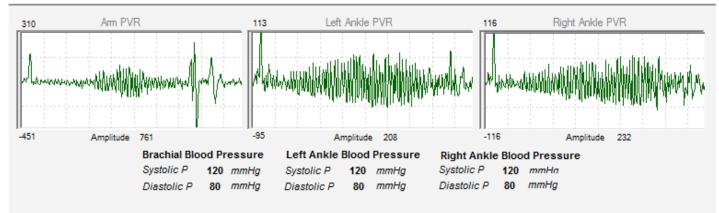
GRAPHICS OF VOLUME PLETHYSMOGRAPHY ANALYSIS



GRAPHICS OF VOLUME PHOTOPLETHYSMOGRAPHY ANALYSIS



GRAPHICS OF SEGMENTAL VOLUME PLETHYSMOGRAPHY ANALYSIS



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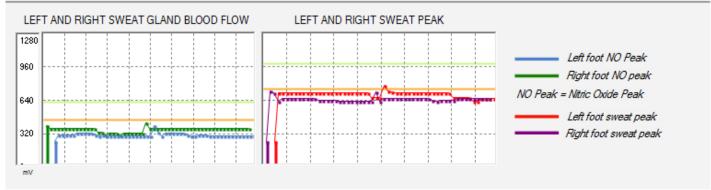


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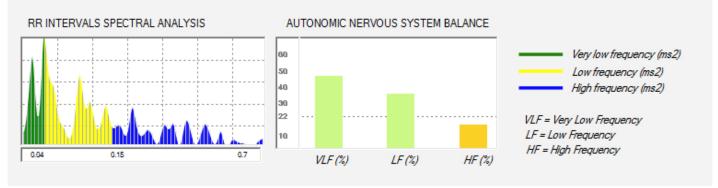
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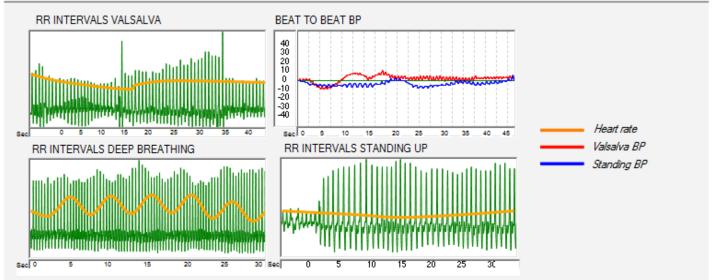
SUDOMOTOR RESPONSE RECORDS



HEART RATE VARIABILITY (HRV) ANALYSIS



CARDIAC AUTONOMIC REFLEX TESTs (CARTs) RECORDS



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RISK ASSESSMENT AND COMMENTS

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* Off label use

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VASCULAR FUNCTION RISKS



AUTONOMIC NEUROPATHY RISKS

| AUTONOMIC NEU | | |
|---------------------------|------------|---|
| SMALL FIBER NEUROPATHY | ABNORMAL | Severe microcirculation disorder in both feet. Treating the underlying condition or lifestyle change as well as lab tests (Vitamin B12; Folate test) suggested. Low sudomotor response in right foot. Moderate decrease in sweat gland density. |
| ANS REGULATION | BORDERLINE | In case of symptom, the patient should be referred to a Neurologist for further examination and treatment option. Mild reduction of VO2 Max. Possibility of mild exercise intolerance. |
| CARDIOVAGAL TESTS | NORMAL | Mild sympathetic predominance and/or mental stress. No cardiac autonomic neuropathy has been detected. |
| SYMPATHETIC TESTS | NORMAL | |



Diabetes risk has been detected. We suggest lab tests exams such as comprehensive metabolic panel. Insulin resistance has been detected. Wellness program is suggested. Bariatric surgery could be envisioned. Mild microvascular disorder has been detected. Kidney lab tests as well as eye exams (Retina) are suggested. No macrovascular risk has been detected.

PHYSICIAN'S NOTES

COMMENTS

COMMENTS

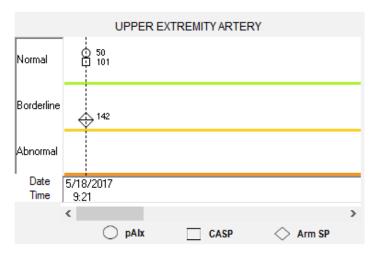
COMMENTS



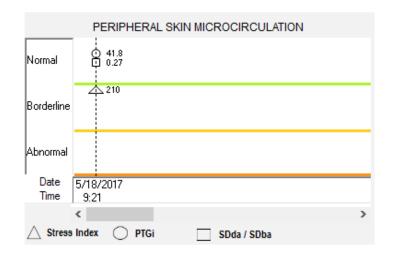
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TREND CHARTS

VASCULAR FUNCTION TREND CHARTS







AUTONOMIC NERVOUS SYSTEM TREND CHARTS

