Table 1: Demographic characteristics and habits.

|  |  |
| --- | --- |
|  | **Pre-hypertensive patients**  (n = 56) |
| Age (years) – mean ± SD | 50.1 ± 10.9 |
| Gender (♂ / ♀) - n | 37/19 |
| Caucasian/Afro-descendant - n | 51/5 |
| Smoker - % | 15 |
| Alcohol consumption - % | 70 |
| Physical exercise - % | 71 |

SD: Standard deviation

Table 2: Anthropometric parameters, peripheral and central hemodynamic responses and arterial stiffness before and after lifestyle changes.

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| --- | --- | --- | --- |
| **Pre-hypertensive patients** | | | |
|  | **Before LC** | **After LC** | ***p-value*** |
| Weight (kg) | 81.0 ± 14.9 | 80.2 ± 14.5 | *NS* |
| BMI (kg/m2) | 29.0 ± 4.6 | 28.5 ± 4.6 | *0.001* |
| Waist (cm) | 103.5 ± 9.1 | 102.9 ± 9.2 | *NS* |
| Hips (cm) | 103.6 ± 8.8 | 103 ± 8.9 | *NS* |
| Waist/Hips (cm) | 0.91 ± 0.07 | 0.89 ± 0.06 | *0.0007* |
| **Peripherals parameters** | | | |
| SBP (mmHg) | 127 ± 8.17 | 122 ± 9.25 | *0.003* |
| DBP(mmHg) | 75 ± 7.47 | 72 ± 7.72 | *0.003* |
| MBP(mmHg) | 92 ± 7.09 | 89 ± 7.65 | *0.002* |
| PP(mm Hg) | 52 ± 6.57 | 51 ± 6.77 | *NS* |
| HR(bpm) | 73± 11.2 | 73 ± 10.6 | *NS* |
| **Central parameters** |  |  |  |
| AI(%) | 82 ± 14.7 | 80 ± 14.6 | *NS* |
| AIx(%) | 82 ± 14.4 | 80 ± 14.7 | *NS* |
| CSP(mmHg) | 113 ± 10.7 | 107 ± 10.9 | *0.0001* |

Values are expressed as means ± SD. \* Significance p-value <0.05; Paired T-test; LC: lifestyle changes; BMI: body mass index; SBP: Systolic blood pressure; DBP: Diastolic blood pressure; MBP: Mean blood pressure; PP: Pulse pressure; HR:Heart rate; Aix: Augmentation Index; CSP: Central systolic pressure.

Table 3: Biochemical parameters before and after lifestyle modification.

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| --- | --- | --- | --- | --- | --- |
|  | **Pre-hypertensive patients** | | |  | |
|  | **Before LC** | | **After LC** | ***p-v*alue** | |
| Fasting glycemia (mg / dL) | 92 ± 13.2 | | 91 ± 14.0 | *NS* | |
| HbA1c *(%)* | 5.6 ± 0.45 | | 5.3 ± 0.44\* | *0.04* | |
| Total Cholesterol (mg / dL) | 205 ± 31.5 | | 199 ± 33.7 | *NS* | |
| HDL cholesterol (mg / dL) | 51.1 ± 9.77 | | 45 ± 11.2\* | *0.02* | |
| LDL-cholesterol (mg / dL) | 127 ± 30.7 | | 126 ± 33.6 | *NS* | |
| Triglycerides (mg / dL) | 130 ± 55.5 | | 151 ± 132.1 | *NS* | |
| Creatinine (mg / dL) | 0.93 ± 0.20 | | 2.7 ± 12.7 | *NS* | |
| Potassium (mEq / dl) | 4.4 ± 0.46 | | 4.6 ± 0.67 | *NS* | |
| Uric acid (mg / dl) | 5.45 ± 1.37 | | 5.96 ± 1.63 | *NS* | |
| Microalbuminuria*(mg/24h)* | 20 ± 63.12 | | 7.63 ± 6.35 | *NS* | |
| **Glomerular Filtration Rate** | |
| CKD-EPI*(mL/min)* | 90.5 ± 12.7 | | 93.5 ± 17.9 | | *NS* |
| MDRD*(mL/min)* | 90.3 ± 17.0 | | 97.0 ± 35.2 | | *NS* |

Values are expressed as means ± SD. \*Significant p-value<0.05; Paired t-test; HbA1c: glycated hemoglobin; HDL: High densitylipoprotein; LDL: Lowdensitylipoprotein; CKD-EPI - Collaboration of Epidemiological Chronic Kidney Disease; MDRD - Diet Modification in Renal Disease.