***Table 1.  Clinical and laboratory data of the ILA patients and Controls***

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| --- | --- | --- | --- |
|  | **ILA group** | **Control group** | **P value** |
|
| **Patients number** | 52 | 44 |  |
| **Age (years)** | 54.90±8.27 | 52.39± 7.34 | 0.118 |
| **Male :  female** | 1.27±0.45 | 1.32±0.47 | 0.605 |
| **BMI (kg/m2)** | 30.40± 4.73 | 30,10±5,51 | 0,778 |
| **Arterial hypertension (%)** | 34 (0.65) | 24 (0.55) | 0.286 |
| **MAP (mmHg)** | 103.30±18.77 | 105.06±14.49 | 0.617 |
| **HR (beats/min)** | 61.09±11.00 | 62.92±9.98 | 0.415 |
| **Glucose (mmol/l)** | 5.31±0.75 | 5.20±0.87 | 0.530 |
| **Smoking (%)** | 9 (0.17) | 8 (0.18 ) | 0.912 |
| **Hypercholesterolemia** | 34 (0.65) | 30 (0.68) | 0.775 |
| **Cholesterol (mmol/l)** | 5.03±1.18 | 5.28±1.12 | 0.299 |
| **LDL (mmol/l)** | 3.11±1.01 | 3.27±0.99 | 0.441 |
| **HDL (mmol/l)** | 1.29±0,39 | 1.23±0,29 | 0.366 |
| **Triglycerides (mmol/l)** | 1.76±1.14 | 1.89±1,21 | 0.608 |
| **Antiaggregation therapy (%)** | 20 (0.38) | 7 (0.16) | 0.012 |
| **Antihypertensive therapy (%)** | 28 (0.54) | 22 (0.50) | 0.711 |
| **Statin therapy (%)** | 15 (0.29) | 11 (0.25) | 0.675 |

Data are presented as mean ± standard deviation for continuous variables and number of subjects (percentage) for categorical variables and p value. BMI: body mass index; LDL: low-density lipoprotein; HDL: high-density lipoprotein; HR: heart rate, MAP: mean arterial pressure

***Table 2.   Haemodynamic parameters in the internal carotid arteries and vertebral arteries of the ILA Group and Control Group***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **ILA group** | **Control group** | **P value** |
|
| **vICAd (m/s)** | 0.20 ±0.05 | 0.23±0.04 | 0.005 |
| **vICAs (m/s)** | 0.63 ±0.12 | 0.69±0.12 | 0.016 |
| **vICAm (m/s)** | 0.35 ±0.07 | 0.39±0.06 | 0.006 |
|  |  |  |  |
| **vVAd (m/s)** | 0.12±0.03 | 0.12±0.03 | 0.631 |
| **vVAs (m/s)** | 0.39±0.06 | 0.39±0.08 | 0.880 |
| **vVAm (m/s)** | 0.21±0.04 | 0.22±0.04 | 0.382 |
|  |  |  |  |
| **PIica** | 1.25 ±0.18 | 1.19±0.12 | 0.081 |
| **RIica** | 0.68 ±0.05 | 0.66±0.04 | 0.107 |
| **AbICA** | 3.19 ±0.59 | 3.00±0.37 | 0.062 |
|  |  |  |  |
| **PIva** | 1.28±0.21 | 1.25±0.18 | 0.494 |
| **RIva** | 0.69±0.06 | 0.68±0.05 | 0.413 |
| **AbVA** | 3.33±0.86 | 3.18±0.58 | 0.325 |
|  |  |  |  |
| **PIm** | 1.27±0.18 | 1.21±0.14 | 0.052 |
| **RIm** | 0.68±0.05 | 0.66±0.04 | 0.072 |
|  |  |  |  |
| **QICAs mm3/s** | 10.962±2.18 | 11.96± 2.87 | 0.070 |
| **QICAd mm3/s** | 3.50±0.88 | 3.98±0.80 | 0.008 |
| **QICAm mm3/s mm3/s** | 5.99±1.23 | 6.64±1.44 | 0.023 |
|  |  |  |  |
| **QVAs mm3/s** | 3.06±0.77 | 3.05±0.89 | 0.938 |
| **QVAd mm3/s** | 0.97±0.32 | 1.00±0.32 | 0.729 |
| **QVAm mm3/s mm3/s** | 1.67±0.44 | 1.70±0.48 | 0.759 |

Data are presented as mean±standard deviation and p value unless otherwise stated. vICAd: average diastolic velocity in internal carotid arteries; vICAs: average systolic blood flow velocity in internal carotid arteries; vICAm: average mean velocity in internal carotid arteries; vVAd: average diastolic velocity in vertebral arteries; vVAs: average systolic blood flow velocity in vertebral arteries; vVAm: average mean velocity in vertebral arteries; PIica: average pulsatility index in internal carotid arteries; RIica: average resistance index in internal carotid arteries; AbICA: average Ab index in internal carotid arteries; PIva: average pulsatility index in vertebral arteries; RIva: average resistance index in vertebral arteries; AbVA: average Ab index in vertebral arteries; PIm: average pulsatility index in vertebral and internal carotid arteries; RIm: average resistance index in vertebral and internal carotid arteries; QICAs: average systolic blood flow in internal carotid arteries; QICAd: average diastolic blood flow in internal carotid arteries; QICAm: average mean blood flow in internal carotid arteries; QVAs: average systolic blood flow in vertebral arteries; QVAd: average diastolic blood flow in vertebral arteries; QVAm: average mean blood flow in vertebral arteries.

***Table 3. Clinical characteristics of the patients grouped according to the Fazekas scale***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fazekas 0**  **mean±SD** | **Fazekas 1**  **mean±SD** | **Fazekas≥2**  **mean±SD** | **P value** |
| **Number** | 44 | 35 | 17 |  |
| **Male: female** | 1.32±0.47 | 1.26±0.44 | 1.29±0.47 | 0. 843 |
| **Age (years)** | 52.39±7.34 | 53.54±8.38 | 57.71±7,52 | 0.060 |
| **AH (%)** | 24 (0.54) | 25 (0.71) | 9 (0.53) | 0.252 |
| **MAP (mmHg)** | 105.06±14.49 | 103.21±16.71 | 103.49±23.28 | 0.889 |
| **HR (beats/min)** | 62.92±9.98 | 60.56±9.73 | 62.24±13.68 | 0.633 |
| **BMI (kg/m2)** | 30.10±5.51 | 31.43±4.63 | 28.28±4.32 | 0,105 |
| **Smoking (%)** | 8 (0.18) | 5 (0.14) | 4 (0.23) | 0.717 |
| **Glucose (mmol/l)** | 5.20±0.87 | 5.35±0.81 | 5.21±0.57 | 0.695 |
| **S-Hol (mmol/l)** | 5.28±1.12 | 5.21±1.11 | 4.64±1.28 | 0,155 |
| **HDL (mmol/l)** | 1.23±0.29 | 1.32±0.43 | 1.24±0.28 | 0.490 |
| **LDL (mmol/l)** | 3.28±0.99 | 3.28±1.01 | 2.76±0.96 | 0,163 |
| **TG (mmol/l)** | 1.89±1.21 | 1.83±0.91 | 1.62±1.55 | 0.738 |
| **Antiaggregation therapy (%)** | 7 (0.16) | 12 (0.34) | 8 (0.47) | 0.031 |
| **Antihypertensive therapy (%)** | 22 (0.50) | 20 (0.57) | 8 (0.47) | 0.744 |
| **Statin therapy (%)** | 11 (0.25) | 10 (0.29) | 5 (0.29) | 0.915 |
| **IMT (mm)** | 0.74±0.18 | 0.77±0.19 | 0.74±0.10 | 0.739 |

ANOVA test was used to compare the continuous variables of the three groups and Chi square was used to compare categorical variables of the three groups. Data are presented as mean ± standard deviation for continuous variables and number of subjects (percentage) for categorical variables and p value. BMI: body mass index; LDL: low-density lipoprotein; HDL: high-density lipoprotein; HR: heart rate; AH: arterial hypertension; MAP: mean arterial pressure; IMT: intima-media thickness.

***Table 4. Haemodynamic parameters of the ILA patients grouped according to the Fazekas score***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fazekas 0**  **mean±SD** | **Fazekas 1**  **mean±SD** | **Fazekas≥2**  **mean±SD** | **P value** |
|  | 44 | 35 | 17 |  |
| **vICAd (m/s)** | 0.23±0.04 | 0.21±0.05 | 0.19±0.05 | 0.006 |
| **vICAs (m/s)** | 0.69±0.12 | 0.64±0.12 | 0.61±0.12 | 0.038 |
| **vICAm (m/s)** | 0.39±0.06 | 0.35±0.07 | 0.33±0.07 | 0.011 |
| **PIica (m/s)** | 1.19±0.12 | 1.22±0.18 | 1.30±0.18 | 0.060 |
| **RIica (m/s)** | 0.66±0.04 | 0.67±0.05 | 0.69±0.05 | 0.073 |
| **AbICA (m/s)** | 3.00±0.37 | 3.11±0.57 | 3.35±0.61 | 0.057 |
| **QICAs mm3/s** | 11.96±2.87 | 10.92±2.31 | 11.05±1.97 | 0.181 |
| **QICAd mm3/s** | 3.98±0.80 | 3.58±0.92 | 3.33±0.79 | 0.019 |
| **QICAm mm3/s** | 6.64±1.43 | 6.03±1.30 | 5.90±1.11 | 0.070 |

ANOVA test was used to compare the three groups. Data are presented as mean± SD (standard deviation) and p value unless otherwise stated. vICAd: average diastolic velocity in internal carotid arteries; vICAs: average systolic velocity in internal carotid arteries; vICAm: average mean velocity in internal carotid arteries; PIicam: average pulsatility index in internal carotid arteries; RIicam: average resistance index in internal carotid arteries; AbICA: average Ab index in internal carotid arteries. QICAs: average systolic blood flow in internal carotid arteries; QICAd: average diastolic blood flow in internal carotid arteries; QICAm: average mean blood flow in internal carotid arteries.

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