**Tables** *Ruihua Hou Inflammatory cytokines in Generalised Anxiety Disorder*

**Table 1 Demographic and clinical characteristics of GAD and healthy control groups**

|  |  |  |
| --- | --- | --- |
|  | **GAD (n=54)** | **Control (n=64)** |
|  | ***Mean ± SD*** | ***Mean ± SD*** |
| **Age (years)** | 35.06 ± 14.45 | 25.75 ± 8.87 |
| **BMI (kg/m2)** | 24.84 ±5.70 | 22.45 ± 3.27 |
| **Sleep (hrs)** | 7.22 ±1.48 | 7.44 ±0.84 |
|  | **Median (LQ, UQ)** | **Median (LQ, UQ)** |
| **HADS - Anxiety** | 14 (11, 16) | 5 (3, 8) |
| **HADS - Depression** | 8.5 (6, 11) | 1 (0, 4) |
| **Perceived Stress Scale** | 10 (7.25, 11) | 4 (2, 6) |
| **Anxiety Sensitivity Index** | 35 (27.5, 42) | 16 (11, 21.75) |
| **Exercise (hrs)** | 1 (0.88, 2) | 1 (0.5, 1) |
|  | ***n (%)*** | ***n (%)*** |
| **Gender - male** | 41 (76%) | 32 (50%) |
| **Smoking**  **Smoker**  **Non-smoker** | 12 (22%)  42 (78%) | 22 (34%)  42 (66%) |
| **Alcohol consumption**  **Frequent user (more than 3 times/week)**  **Non-frequent users ( less than 2 times/week)** | 13 (24%)  41(76%) | 14 (22%)  50 (78%) |
| **Use of anxiolytic medication**  **Yes**  **No** | 36 (67%)  18 (33%) | ¯  ¯ |

Demographic and clinical characteristics of the GAD group and the healthy control group were presented in Table 1. GAD, generalised anxiety disorder; BMI, body mass index; SD, standard deviation; LQ, lower quartile; UQ, upper quartile; *n*, number of participants.

**Table 2 Comparison of anxiety and depression between GAD and healthy control groups**

|  |  |  |  |
| --- | --- | --- | --- |
| Predictor score  Outcome = GAD (1=yes, 0=no) | ***OR***† | ***95%CI*** | ***P*** |
| **HADS - Anxiety** | 1.60 | 1.35-1.89 | **<0.001** |
| **HADS - Depression** | 1.55 | 1.31-1.83 | **<0.001** |
| **Perceived Stress Scale** | 1.73 | 1.41-2.11 | **<0.001** |
| **Anxiety Sensitivity Index** | 1.19 | 1.12-1.27 | **<0.001** |

There were significant group differences in terms of HADS-anxiety, HADS-depression, perceived stress, and anxiety sensitivity index (*p*<0.001 in all cases). † Odds ratios adjusted for gender, age and BMI. GAD, generalised anxiety disorder; HADS, the Hospital Anxiety Depression Scale.

**Table 3 Comparison of cytokine profile between GAD and healthy control groups**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Cytokines***  ***(pg/ml)*** | ***GAD***  ***Median (LQ, UQ)*** | ***Control***  ***Median (LQ, UQ)*** | ***Controlling for age, gender, BMI, smoking, and alcohol consumption***    ***+ controlling for depression*** | | | | | | | | | |
|  |  |  | ***OR†***  ***Per SD*** | | ***95%CI*** | | ***P*** | | ***OR†***  ***Per SD*** | | ***95%CI*** | ***P*** |
| **IL-4** | 0.04 (0.02, 0.06) | 0.04 (0.00, 0.14) | 0.96 | 0.60, 1.54 | | 0.866 | | 1.24 | | 0.69, 2.23 | | 0.481 |
| **IL-10** | 0.22 (0.16, 0.31) | 0.80 (0.46, 1.25) | 0.27 | 0.14, 0.51 | | **<0.001** | | 0.35 | | 0.17, 0.70 | | **0.003** |
| **TNF-α** | 1.71 (1.30, 1.99) | 1.11 (0.72, 1.69) | 0.17 | 0.09, 0.32 | | **<0.001** | | 0.22 | | 0.19, 0.47 | | **<0.001** |
| **IFN-γ** | 3.02 (2.07, 5.16) | 1.07 (0.69, 1.63) | 6.83 | 2.94, 15.90 | | **<0.001** | | 7.46 | | 2.50, 22.22 | | **<0.001** |

After controlling for age, gender, BMI, smoking and alcohol consumption, the GAD group had lower levels of IL-10 but higher levels of IFN-γ and TNF-α (p<0.001 in all cases). These differences remained significant after adjustment for co-morbid depression. GAD, generalised anxiety disorder. † Odds ratios adjusted for gender, age, BMI, smoking, and alcohol consumption. LQ, lower quartile; UQ, upper quartile; OR, odds ratio; CI, confidence interval.

**Table 4 Associations between cytokine levels and GAD according to use of medication**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cytokine**  **(pg/ml)** | **Whether on medication** | ***OR*** | ***95%CI*** | ***P*** | ***P for difference*** |
|  |  |  |  |  |  |
| **IL4** | Yes | 0.92 | 0.56, 1.53 | 0.76 | 0.88 |
| No | 1.07 | 0.59, 1.93 | 0.83 |
|  |  |  |  |  |  |
| **IL10** | Yes | 0.34 | 0.18, 0.64 | 0.001 | 0.59 |
| No | 0.25 | 0.11, 0.57 | 0.001 |
|  |  |  |  |  |  |
| **TNF-α** | Yes | 0.19 | 0.08, 0.43 | <0.001 | 0.64 |
| No | 0.20 | 0.08, 0.52 | 0.001 |
|  |  |  |  |  |  |
| **IFN-γ** | Yes | 6.58 | 2.65, 16.33 | <0.001 | 0.30 |
| No | 6.14 | 2.34, 16.13 | <0.001 |
|  |  |  |  |  |  |

There were no differences between subgroups based on whether they were on anxiolytic medication or not.