**Slow radiological improvement and persistent low-grade inflammation after chemotherapy in tuberculosis patients with type 2 diabetes**

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**Supplementary Table 1.** Baseline clinical signs and symptoms of the study patientsa

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | TB (n=40) | TB-DM (n=40) | *p*-value |
| Cough | 40 (100) | 40 (100) | 0.991 |
| Hemoptysis | 18 (45.0) | 16 (40.0) | 0.30 |
| Dyspnoea | 0 | 4 (10.0) | 0.04 |
| Chest Pain | 36 (90.0) | 26 (65.0) | <0.001 |
| Night sweat | 27 (67.5) | 36 (90.0) | <0.001 |
| Anemia | 10 (33.3) | 0 | 0.001 |
| Fever | 40 (100) | 40 (100) | 0.991 |
| BMI (Kg/m2) |  |  |  |
| <18 | 26 (65.0) | 2 (5.0) | <0.001 |
| <16 | 9 (22.5) | 0 | 0.001 |
| MUAC |  |  |  |
| <220 mm | 9 (22.5) | 4 (10.0) | 0.390 |
| <200 mm | 2 (20.0) | 0 | 0.152 |
| Loss of appetite | 33 (82.5) | 22 (55) | 0.002 |
| Anorexia | 37 (92.5) | 33 (82.5) | 0.176 |
| Nausea | 29 (72.5) | 17 (42.5) | 0.004 |
| Joint pain | 16 (40.0) | 22 (55.0) | 0.179 |

aData presented as number (percentage) of patients. Chi-square test was used to compare clinical variables between TB to TB-DM patients at baseline.

BMI: body mass index

**Supplementary Table 2.** Hematological features in the TB and TB-DM patients and healthy controlsa

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Controls | TB group (n=35)b | | | | TB-DM group (n=36)b | | | |
|  | (n-20) | Baselinec | Month 1c | Month 2c | Month 6c | Baselinec | Month 1c | Month 2c | Month 6c |
| ESR | 22.56±5.9 | 38.95±4.3 | 38.64±4.0 | 29.21±3.7 | 11.30±2.2 | 44.0±4.31 | 26.70±3.7§ | 18.0±3.5 | 9.64±2.1 |
| Hb, mg/dL | 13.44±0.40 | 12.39±0.3 | 13.10±0.29 | 13.74±0.45 | 14.18±0.27 | 13.43±0.3\* | 14.33±0.31§ | 14.18±0.42 | 15.00±0.26 |
| WBC count, % | 7.71±0.81 | 10.91±0.61 | 9.69±0.91 | 8.47±0.57 | 7.16±0.38† | 11.86±0.60 | 9.80±0.59 | 8.76±0.57 | 8.66±0.39† |
| Lymphocyte, % | 31.55±1.9 | 17.52±1.89 | 22.11±2.19 | 26.68±2.22 | 33.57±1.80 | 19.25±1.19 | 25.24±2.06 | 29.34±2.13 | 31.33±1.73 |
| Neutrophil, % | 58.30±2.57 | 73.01±1.73 | 65.27±2.49 | 63.11±2.29 | 55.39±1.90 | 71.25±1.73 | 64.87±2.34 | 59.71±2.20 | 58.60±1.82 |
| Monocyte, % | 5.46±0.47 | 6.51±0.33\* | 5.23±0.26 | 5.64±0.33 | 5.78±0.26 | 5.36±0.34 | 5.21±0.25 | 5.01±0.32 | 4.58±0.20 |
| Platelet, % | 308.5±32.1 | 382.5±22.7 | 316.5±26.7 | 291.4±26.7 | 276.0±16.2 | 391.9±22.7 | 331.5±25.1 | 305.7±25.1 | 239.9±15.3 |
| NLR | 2.66±0.69 | 4.74±0.50 | 3.30±0.44 | 2.81±0.35 | 1.82±0.24 | 4.68±0.50 | 3.24±0.41 | 2.53±0.34 | 2.11±0.23 |
| MLR | 0.24±0.06 | 0.42±0.04 | 0.26±0.03 | 0.24±0.02 | 0.18±0.02 | 0.34±0.03 | 0.24±0.03 | 0.20±0.02 | 0.17±0.02 |
| PLR | 14.61±4.6 | 25.0±3.37 | 15.84±3.29 | 12.18±3.43 | 8.78±0.73 | 26.31±2.21 | 17.74±3.10 | 15.0±3.29 | 8.12±0.70 |

aData was given with mean ± standard error of means (SEM).

bMultivariate regression analysis was used for comparisons between TB and TB-DM groups and the model was adjusted by age, sex, baseline BMI, SES score and BCG vaccination status. Between groups difference are depicted by the following symbols, at baseline\*; month 1§; month 6†. Significant data at baseline were adjusted at the subsequent time points.

cTwo-way repeated measure ANOVA was carried out to evaluate within group difference between baseline and month 1 or month 2 or month 6.

BCG: *Bacillus Calmette–Guérin;* BMI: body mass index; ESR: erythrocyte sedimentation rate; Hb: hemoglobin; MLR: monocyte-to-lymphocyte ratio; NLR: neutrophil-to-lymphocyte ratio; PLR: platelet-to-lymphocyte ratio; SES: socioeconomic status; WBC: white blood cell.

**Supplementary Table 3**. Pulmonary pathology in TB-DM compared to TB patientsa

|  |  |  |  |
| --- | --- | --- | --- |
| % Lung  involvementd | Month | Difference (95% CI) | p-value |
| Whole lung | 0 | 8.03 (0.01, 16.05) | 0.050b |
| 1 | 0.55(-4.01, 5.12) | 0.811b |
| 2 | 1.18(-3.86, 6.22) | 0.641b |
| 6 | -1.00(-4.72, 2.72) | 0.584b |
| Overall changes | 6.34(0.33, 12.35) | 0.039c |
| Upper zone | 0 | -11.20(-37.00, 14.55) | 0.389b |
| 1 | 6.13(-18.77, 31.02) | 0.625b |
| 2 | 3.86(-17.37, 25.09) | 0.718b |
| 6 | 0.87(-15.48, 17.22) | 0.916b |
| Overall changes | -6.30(-24.90, 12.30) | 0.507c |
| Middle zone | 0 | 29.36(6.53, 52.18) | 0.012b |
| 1 | 5.41(-1.73, 12.56) | 0.135b |
| 2 | 4.80(-5.83, 15.43) | 0.371b |
| 6 | -1.41(-13.04, 10.22) | 0.810b |
| Overall changes | 25.37(7.92, 42.82) | 0.004c |
| Lower zone | 0 | 23.76(4.11, 43.40) | 0.018b |
| 1 | -2.32(-9.46, 4.81) | 0.518b |
| 2 | -1.12(-10.00, 7.74) | 0.801b |
| 6 | 0.42(-8.22, 9.06) | 0.923b |
| Overall changes | 16.83(2.65, 31.01) | 0.020c |

aThe results are expressed as difference of mean and 95% confidence interval (CI). bMultivariate regression and cGeneralized estimating equation (GEE; for overall changes) models were used to compare TB (n=35) vs TB-DM (n=36) group and Both models were adjusted by age, sex, baseline BMI, SES score and BCG vaccination status and baseline lung involvement. GEE model was additionally adjusted by time (to reduce multicollinearity).

dEach of the three zones in the two lung lobes could have a maximum of 100% pathological involvement, and therefore the total % lung involvement in the upper, middle or lower zones could be maximum 100 + 100 = 200%, respectively (B-D), while the total % lung involvement including all three zones in both lung lobes in a patient could be maximum 3 x 100 x 2 = 600%.