**Table 2.** Comparative analysis of sarcopenia algorithm parameters before surgery and 1,6,12 and 18 months after surgery

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Before Surgery | After Surgery | | | | | | | | | | |
|  | ***Baseline - E0*** | ***1month - E1*** | | ***6month - E2*** | | | ***12month - E3*** | | | ***18month - E4*** | | |
| Variables (\*Mean ± SE) |  |  | *E1\*E0*  *p-value* |  | *E2\*E0*  *p-value* | *E2\*E1*  *p-value* |  | *E3\*E0*  *p-value* | *E3\*E2*  *p-value* |  | *E4\*E0*  *p-value* | *E4\*E3*  *p-value* |
| *Anthropometry* | | | | | | | | | | | | |
| Body weight (kg) | 105.9 ± 17.5 | 91.8 ± 14.7 | **< 0.001** | 75.4 ± 14.70 | **< 0.001** | **< 0.001** | 69.9± 12.1 | **< 0.001** | **< 0.001** | 70.8 ± 12 | **< 0.001** | 0.438 |
| Total weight loss (%) | NA | NA | NA | 13.1 ± 4.32 | NA | NA | 29 ± 4.58 | NA | **<0.009** | 32.5 ± 9.76 | NA | 0.251 |
| BMI (kg/m2) | 42.6 ± 5 | 37 ± 4.53 | **< 0.001** | 30.2 ± 4.17 | **< 0.001** | **< 0.001** | 28.2 ± 4.34 | **< 0.001** | **0.008** | 28.7 ± 4.93 | **< 0.001** | 0.313 |
| Waist circumference (cm) | 123 ± 12 | 110 ± 11.4 | **< 0.001** | 97.2 ± 12.8 | **< 0.001** | **< 0.001** | 94.2 ± 12.2 | **< 0.001** | **0.016** | 93.6 ± 11 | **< 0.001** | 0.575 |
| *Physical function and strength* | | | | | | | | | | | | |
| Handgrip (Kg) | 20.4 ± 6.44 | 18.1 ± 6.44 | **0.002** | 16.8 ± 5.25 | **0.002** | 0.358 | 17.7 ± 5.11 | **0,016** | 0.257 | 17.3 ± 5.44 | **0.005** | 0.479 |
| Sit-to-stand (STS) (n) | 12.6 ± 3.55 | 12.8 ± 3.33 | 0.415 | 13.2 ± 2.88 | 0.105 | 0.120 | 13.1 ± 2.45 | 0.073 | 0.956 | 12.8 ± 2.70 | 0.259 | 0.157 |
| *Body composition* | | | | | | | | | | | | |
| Fat mass (Kg) | 46.34 ± 15.1 | 44.47 ± 9.97 | **0.003** | 37.42 ± 7.92 | **0.003** | **< 0.001** | 34.19± 6.99 | **0.002** | **< 0.001** | 30.45 ± 11.6 | **< 0.001** | 0.098 |
| Body fat (%) | 47.1 ± 3.90 | 45.5 ± 4.99 | **0.023** | 40.6 ± 7.26 | **< 0.001** | **< 0.001** | 37.4 ± 6.34 | **< 0.001** | **< 0.001** | 37 ± 7.71 | **< 0.001** | 0.711 |
| Lean mass (Kg) | 53.45 ± 10.48 | 48.01 ± 9.47 | **< 0.001** | 44.65 ± 9.54 | **< 0.001** | **< 0.001** | 39.98 ± 5.08 | **< 0.001** | **< 0.001** | 37.14 ± 4.6 | **< 0.001** | **< 0.001** |
| ASMM (Kg) | 21.92 ± 5.13 | 19.72 ± 4.79 | **< 0.001** | 17.53 ± 4.11 | **< 0.001** | **< 0.001** | 15.90 ± 4.06 | **< 0.001** | **< 0.001** | 14.40 ± 4.32 | **< 0.001** | **< 0.001** |
| ASMMI (Kg/m2) | 8.79 ± 1.57 | 7.91 ± 1.48 | **< 0.001** | 7.03 ± 1.22 | **< 0.001** | **< 0.001** | 6.39 ± 1.28 | **< 0.001** | **< 0.001** | 5.79 ± 1.45 | **< 0.001** | **< 0.001** |
| ASMM/Weight (Kg/kg) | 20.6 ± 2.36 | 21.4 ± 2.18 | **0.039** | 23.3 ± 3.13 | **< 0.001** | **< 0.001** | 21.1 ± 3.12 | 0.328 | **< 0.001** | 20.5 ± 5.65 | 0.517 | 0.538 |
| ASMM/BMI | 0.514 ± 0.10 | 0.535 ± 0.12 | **0.034** | 0.580 ± 0.11 | **< 0.001** | **< 0.001** | 0.496 ± 0.19 | **0.003** | 0.515 | 0.570 ± 0.14 | 0.535 | **0.002** |
| *Physical performance* | | | | | | | | | | | | |
| 400-m walk test (min) | 7.61 ± 2.81 | 8.79 ± 3.40 | **0.016** | 8.74 ± 3.05 | **0.005** | 0.890 | 9.58 ± 3.58 | **< 0.001** | **0.019** | 10.1 ± 4.12 | **< 0.001** | 0.134 |

BMI: Body Mass Index, SMM: Skeletal Muscle Mass, ASMM: Appendicular Skeletal Muscle Mass, ASMMI: Appendicular Skeletal Muscle Mass Index, 400-m: 400 meters.