**Supplementary Table 1.** **Before-and-after relative changes on parameters of femoral vein by GCS types \***

| **Relative changes, %** | **Type A GCS N=71** | **P** | **Type B GCS N=70** | **P** | **Total N=141** | **P** |
| --- | --- | --- | --- | --- | --- | --- |
| **Diameters** |  |  |  |  |  |  |
| postoperative to preoperative baseline | -12.2 (-21.6, -1.9) | <.0001 | -13.8 (-23.5, -4.0) | <.0001 | -13.5 (-22.4, -3.6) | <.0001 |
| GCS to preoperative baseline | -8.5 (-19.4, 0.0) | <.0001 | -10.5 (-17.6, -3.4) | <.0001 | -9.6 (-18.2, -1.7) | <.0001 |
| GCS to postoperative baseline | -3.9 (-12.4, 6.4) | 0.1336 | -4.3 (-13.4, 6.3) | 0.0943 | -4.3 (-12.7, 6.3) | 0.0229 |
| GCS + ankle pump to preoperative baseline | -13.5 (-23.0, -0.9) | <.0001 | -13.9 (-23.1, -4.1) | <.0001 | -13.8 (-23.0, -2.6) | <.0001 |
| GCS + ankle pump to postoperative baseline | -10.0 (-19.6, 2.6) | <.0001 | -10.0 (-16.0, -1.3) | <.0001 | -10.0 (-17.1, 0.0) | <.0001 |
| GCS + ankle pump to GCS | 1.4 (-6.5, 6.3) | 0.9557 | 0.0 (-4.1, 5.9) | 0.7533 | 0.8 (-5.2, 5.9) | 0.7185 |
| **Peak velocity** |  |  |  |  |  |  |
| postoperative to preoperative baseline | 2.6 (-21.2, 24.7) | 0.3422 | 12.0 (-22.0, 44.6) | 0.0222 | 6.8 (-21.2, 32.2) | 0.0209 |
| GCS to preoperative baseline | -0.2 (-23.3, 43.8) | 0.2644 | 7.8 (-7.7, 44.3) | 0.0043 | 3.7 (-19.8, 43.8) | 0.0060 |
| GCS to postoperative baseline | 0.8 (-17.7, 20.6) | 0.4672 | -0.6 (-19.8, 17.9) | 0.9285 | 0.8 (-17.7, 18.7) | 0.5491 |
| GCS + ankle pump to preoperative baseline | 0.5 (-28.2, 46.3) | 0.0934 | 13.8 (-17.0, 42.9) | 0.0058 | 11.4 (-22.5, 45.6) | 0.0028 |
| GCS + ankle pump to postoperative baseline | 2.4 (-18.9, 30.4) | 0.1452 | -5.7 (-18.3, 16.8) | 0.9838 | -2.1 (-18.3, 23.1) | 0.2728 |
| GCS + ankle pump to GCS | -0.5 (-10.6, 15.9) | 0.5331 | -0.3 (-12.7, 13.8) | 0.8781 | -0.5 (-11.1, 14.7) | 0.5455 |
| **Trough velocity** |  |  |  |  |  |  |
| postoperative to preoperative baseline | 30.9 (-24.0, 146.8) | <.0001 | 43.5 (-26.9, 185.5) | <.0001 | 34.6 (-24.0, 165.0) | <.0001 |
| GCS to preoperative baseline | 34.5 (-13.3, 149.5) | <.0001 | 63.3 (-7.5, 225.5) | <.0001 | 42.4 (-9.6, 185.1) | <.0001 |
| GCS to postoperative baseline | 1.1 (-24.1, 47.1) | 0.1471 | -0.6 (-21.7, 52.1) | 0.2272 | 0.0 (-22.4, 50.9) | 0.0548 |
| GCS + ankle pump to preoperative baseline | 51.7 (-10.9, 175.1) | <.0001 | 76.3 (-5.0, 172.5) | <.0001 | 64.7 (-7.3, 172.5) | <.0001 |
| GCS + ankle pump to postoperative baseline | 15.0 (-25.2, 85.6) | 0.0076 | -0.6 (-24.9, 66.5) | 0.0423 | 9.8 (-25.1, 73.2) | 0.0007 |
| GCS + ankle pump to GCS | -3.3 (-13.7, 35.7) | 0.2205 | 4.1 (-14.5, 25.1) | 0.2032 | 0.4 (-14.1, 27.8) | 0.0709 |

Note: \* interventions included wearing GCS only, and GCS + ankle pump.

P values were estimated by Wilcoxon signed-rank test for the comparisons before and after interventions. Abbreviations: GCS, GCS, graduated compression stocking.