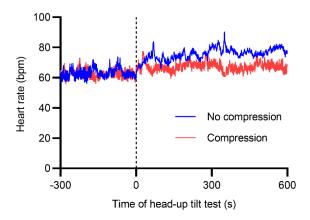


Supplementary Material

Supplementary Figures

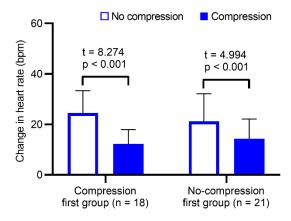


| Variable | Position | No compression | Compression | |
|------------------|----------|----------------|-------------|--|
| Heart rate (bpm) | Supine | 63.5 | 62.4 | |
| | HUT | 80.3 | 68.6 | |
| Stress Index | Supine | 9.4 | 11.1 | |
| | HUT | 22.6 | 12.9 | |
| RMSSD (ms) | Supine | 45.9 | 43.6 | |
| | HUT | 11.8 | 35.4 | |
| LF (ms²) | Supine | 566 | 229 | |
| | HUT | 62 | 148 | |
| HF (ms²) | Supine | 913 | 790 | |
| | HUT | 55 | 609 | |
| LF/HF ratio | Supine | 0.62 | 0.29 | |
| | HUT | 1.13 | 0.24 | |

Supplementary Figure S1. Spectrum of heart rate responses to head-up tilt with and without compression.

Representative heart rate changes during the head-up tilt test with (red line) and without (blue line) compression in a female participant. The vertical dashed line indicates the start of the postural change. The table below the figure represents the measurement values of heart rate and heart rate variability parameters.

RMSSD, root mean square of successive differences between adjacent R-R intervals; LF, low-frequency component of heart rate variability; HF, high-frequency component of heart rate variability



Supplementary Figure S2. Comparison of heart rate changes during the head-up tilt test between the conditions in the compression-first and no-compression-first groups

White and blue bars indicate the mean values of heart rate changes during the head-up tilt test in the no-compression and compression conditions, respectively. Error bars indicate the standard deviation.

Supplementary Table S1. Comparisons of heart rate and heart rate variability parameters during the supine position between the first and second head-up tilt tests

| Variable | First HUT test | Second HUT test | t-value | p-value |
|-----------------------|-----------------|-----------------|---------|---------|
| Heart rate (bpm) | 66.6 ± 10.3 | 64.0 ± 9.6 | 3.145 | 0.003 |
| Stress Index | 10.4 ± 3.7 | 9.9 ± 4.1 | 1.217 | 0.231 |
| RMSSD (ms) | 51.9 ± 26.3 | 57.3 ± 31.7 | 1.953 | 0.058 |
| LF (ms ²) | 691 ± 915 | 785 ± 842 | 0.582 | 0.564 |
| HF (ms ²) | 1445 ± 1434 | 1661 ± 2037 | 1.102 | 0.278 |
| LF/HF ratio | 0.57 ± 0.48 | 0.67 ± 0.63 | 1.429 | 0.161 |

Values are presented as mean \pm standard deviation.

HUT, head-up tilt; RMSSD, root mean square of successive differences between adjacent R-R intervals; LF, low-frequency component of heart rate variability; HF, high-frequency component of heart rate variability