

## Changes in Blood Pressure in the Trunk and Pelvis during Exercises

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### Abstract

The purpose of this study was to investigate changes in blood pressure during exercises of the trunk and pelvis. This information is important for the management of risk in the clinical physical and occupational therapy setting. The subjects were 10 healthy young people ( $20.6 \pm 1.0$  years old). Systolic (SBP) and diastolic blood pressure (DBP) were measured at the right radial artery with a continuous blood pressure measuring apparatus while the subjects performed three exercises involving the trunk and pelvis. Maximal SBP and DBP values increased significantly during all exercises compared with those at rest. Minimal SBP and DBP values decreased significantly during sitting up and pelvic tilt exercises compared with those at rest. Blood pressure fluctuated in a range of 23–36 mmHg during these exercises. These results indicate that physical and occupational therapists should manage the risk of changes in blood pressure carefully when patients are asked to practice these kinds of exercises.

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