

Effect of Traditional Thai Massage on Recovery Based on Heart Rate Variability and Physical
Fitness in Basketball Players

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Abstract

Thai massage is an alternative treatment for Thai professional athletes. It is generally for the treatment of body stress or pain. But, it is hardly used for rapid recovery on the sport field that always needs rapid recovery during half-time brake of competition such as basketball. The purpose of this research is to investigate the acute effects of Traditional Thai Massage on recovery in basketball players as indicated by heart rate variability (HRV) and physical fitness. A cross-over design was administered. Sixteen basketball players were randomly allocated into two groups: intervened with Traditional Thai Massage (TTM) and Control (C). Each period, the participants underwent 20 minutes of basketball-playing simulation after which they were assessed on HRV and physical fitness. Then they received either 10-minute TTM intervention or 10-minute rest, and were assessed again immediately after the interventions with 3 days washout period. The results showed that HRV and physical fitness were significantly increased ($P < 0.05$) in both groups after the interventions. There was no significant difference of LF/HF ratio (LF/HF ratio) in the control group. Mean changes in Grip strength test (GST) and High Frequency (HF) were found to be higher in the TTM than the control on between-group comparison ($P < 0.05$). Both TTM and passive rest could enhance recovery after strenuous basketball playing. However, the TTM presented greater improvement from fatigue than passive rest as indicated by HRV and GST.

Keywords: Traditional Thai Massage (TTM), Heart Rate Variability (HRV), Basketball Players, Fatigue, Recovery