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The body position is influencing multiple physiological functions, including blood pressure, lung capacity, and mood. A previous study indicated significant difference in the HR measures in sitting, prone, and supine position if the breathing pace is normalized to the same frequency (Watanabe et al. 2007). The aim of the study was to determine if heart rate is different in sitting, prone, and supine positions under more common circumstances, when the breathing pattern is not unnaturally adjusted. Heart rates were measured for 1 min in 12 male and female healthy volunteers (average age of those was 35.8±17.58) after they were instructed to remain in a seated position for 10 min, and then after 5 minutes in prone and supine positions. Participants kept the same posture during HR measures. Average HR in the sitting position recorded in the study was 77.7±10.22 beats/min; HR in prone position was 78.5±8.32 beats/min; and HR in supine position was 74.8±5.61 beats/min. There were no statistically significant differences between group means as determined by one-way ANOVA ($F(2,30) = 0.89, p = .42$). Our data indicate that the sitting, prone, and supine position have similar effect on HR if breathing pattern is not adjusted. As prone, supine, or sitting positions are commonly accepted by patients undergoing manual therapy, our data may have an important implication for efficient management of such patients. The finding of this study also can be used for development of better treatment strategies of the individuals that are exhibiting various degree of circulatory compromise.