# Blood and central venous pressure responses after serial tourniquet deflation during bilateral total knee replacement.

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摘要

## Abstract

Thirty-five patients who underwent one-stage bilateral total knee replacement were included in this study to determine whether there was any difference in hemodynamic effects following the deflation of the first and second tourniquets. The values of hemodynamic variables were not significantly different immediately before either the first or the second tourniquet release as compared to preoperative values. The changes in heart rate after the release of the first and second tourniquets showed similar patterns. The systolic and diastolic blood pressure decreased significantly after deflation of the first and second tourniquets. However, the decrease was more marked after the second tourniquet deflation. The level of central venous pressure decreased significantly after the release of the first and second tourniquets but the patterns of change were not significantly different. The need for administration of ephedrine was also higher after the deflation of the second tourniquet than after the first. We conclude that the blood pressure changes after the second tourniquet deflation are more pronounced than those following the first tourniquet deflation. Anesthesiologists must be aware of this phenomenon and prevent marked hemodynamic changes that could be detrimental to high-risk patients.