

Original Paper

## Effect of changing position and early ambulation on the bleeding, hematoma and urinary retention in patients with coronary angiography

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### Abstract

**Background and Objective:** Coronary angiography is a routine and gold standard cardiac diagnostic procedure. Patients are restricted to bed rest after the procedure due to potential vascular complications using a femoral approach. Many patients are required to remain on bed rest for up to 24 hours after the procedure. The aim of this study was to assess the effect of changing position and early ambulation on the amount of bleeding, hematoma and urinary retention in patients with coronary angiography.

**Materials and Methods:** In this clinical trial study 140 patients, which referred to coronary angiography center in Dezfoul-Iran, were randomly divided into four 35-individual groups. The patients in the control group were in supine position for 6 hours without movement. Position change was applied to the first interventional group based on a specific protocol, early discharge was applied to the second interventional group and both early discharge and position changes were applied to the third interventional group. The level of bleeding, hematoma and urinary retention were measured at zero, 1, 2, 4, 6 and 24 hours after angiography. The findings were collected using the individual data questionnaire and Kristin Swain's checklist in order to evaluate the level of bleeding and hematoma.

**Results:** There were no significant differences between the four groups in terms of occurrence of vascular hematoma and bleeding. The incidence of urinary retention was non significantly higher in the control group in compare to others.

**Conclusion:** Changing position following angiography speed up patient discharge from hospital.

**Keywords:** Angiography, Changing position, Early ambulation, Bleeding, Hematoma, Urinary retention

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Received 20 May 2012

Revised 9 June 2013

Accepted 10 June 2013