COMPARISON OF MANUAL COMPRESSION AND THE USE OF THE HEMOSTATIC PATCH (SYVEKPATCH™) FOLLOWING CORONARY ANGIOGRAPHY PROCEDURES IN PATIENT SATISFACTION, NURSING PRODUCTIVITY AND COST

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Femoral sheath removal followed by compression of the femoral artery after a coronary angiography for diagnostic and intervention procedures is a nursing responsibility across many hospital settings.1 Several methods exist for achieving hemostasis of the femoral artery after the discontinuation of the sheath. Nurses can use manual pressure alone, manual pressure and a compression device such as Femostop™; or manual pressure and utilizing hemostasis patch such as SyvekPatch.

The purpose of this quasi-experimental, randomized study was to compare the effects two groin compression methods: manual compression and manual compression with a hemostatic patch (SyvekPatch) on patient comfort, time to hemostasis, duration of bed rest, length of stay and cost of care.

There was no significant differences in pain scores between the manual and hemostatic patch groups using the Numeric Rating Pain Scale (r=.80). A statistical significant was found regarding pressure time between the two groups with the hemostatic patch group having a lower pressure time (t=2.95, p≤.004). However, no clinical significance was found as the mean times differed by only 3.34 minutes. The mean pressure time for manual compression was 14.74 (N=39, AD 7.159) and the mean pressure time using hemostatic patch was 11.40 (N=50, SD 3.201). The actual duration of bed rest was determined based on physician order with manual compression group on bed rest 1-2 hours longer than the hemostatic patch group. There was no difference in the length of stay between the two groups nor a change in the staffing level. There was no cost saving related to labor, however, the patch has a cost of $76/unit with a usage of 873 per year at the facility yielding a potential cost savings of $68,500 per year.
References
