BACKGROUND

- Trans-femoral percutaneous coronary procedures have evolved as a mainstay in both diagnostic and interventional cardiology. Access site complications estimated to occur in 1% to 5% of the procedures.
- These complications range from simple hematomas to significant bleeding events that require transfusion and extended hospital stay.
- Pressure dressing has been used as a standard after Cardiac catheterization patient reported pain and discomfort when it’s in place and skin complications afterward.
- Application of Transparent Film Dressing (TFD) approved and rated better with regard to: comfort, less pain, decrease hematoma formation and facilitates nurses assessment of the puncture site after the procedure.

Objectives

The aim of this study is to compare the effectiveness of using TFD vs. pressure dressing with respect to three outcomes: bleeding and hematoma, patients satisfaction, and nurse-reported ease of assessment of the sheath insertion site in the groin after the procedure.

MATERIAL & METHODS

Design: Experimental design, RCT.
Setting: This study has been conducted at the cardic catheterization laboratory, King Fahd Hospital of the University (KFHU), Al-Khobar, Kingdom of Saudi Arabia (KSA).
Subjects: Random sample of 80 patients underwent cardiac catheterization (diagnostic –therapeutic) through the femoral approach were included in this study.
- All nurses enrolled in the units or wards where patients admitted after CAG or PTCA were included.

Tools for data collection:
1) Demographic and medical data sheet.
2) Hematoma Formation and Bleeding Scale.
3) Skin Integrity Scale.
4) Patient Discomfort and Pain Scale.
5) Nurses Ease of Assessment Scale.

Procedure:
- Patients divided randomly into two groups: 1-Group 1 ( N= 40 ) assigned to pressure dressing. 2-Group 2 ( N= 40 ) assigned to the Transparent Film Dressing.
- Both groups were closely monitored in regard to:
  - Bleeding or hematoma formation.
  - Patient's discomfort or complaint.
- Patients were asked to ambulate after completing 8 hrs of bed rest.

Exclusion criteria:
- Hematoma greater than 2 cm right after the cardiac catheterization procedure
- Compression time more than 40 minutes
- On an active antiocoagulation regimen
- Inability to lie flat for at least 8 hrs
- Hemodynamic instability
- Known to be allergic to any of the dressing materials
- Unwilling to participate and no informed consent

RESULTS

- The results of the study showed that: the mean age of patients was 54.8 ±10.7 years, (70%) were female. The mean of BMI was 30.5±3.24.
- No significant differences were noted between the two groups variables in patients base line characteristics and medical data.

Impact of type of dressing on skin integrity

- Pressure Dressing
- TFD

Impact of type of dressing on hematoma and bleeding

- Pressure Dressing
- TFD

Impact of type of dressing on patient discomfort

- Pressure Dressing
- TFD

CONCLUSION

Dressing of the puncture site after cardiac catheterization with TFD was more comfortable than the conventional pressure dressing without any difference in hematoma or bleeding complications.

RECOMMENDATIONS

- TFD can be used safely and comfortably after achieving hemostasis for both diagnostic and therapeutic cardiac catheterization.
- Clinical educators and clinical nurse specialists are in a position to identify variation in nursing practice and implementation evidence-based care to ensure positive clinical outcomes for all patients.
- Patients should be given both verbal and written education before the procedure and discharge instruction for the procedure to prevent the development of complications such as Hematoma and bleeding.

DISCLOSURES

None