

NEVADA STATE BOARD OF NURSING

Practice Decision

Insertion of a collagen plug by a Registered Nurse (RN) to achieve vascular hemostasis after intravascular catheterization and/or intervention

The Nevada State Board of Nursing finds that a qualified cardiac catheterization lab RN who has completed appropriate competency as defined by the institution, may employ collagen plug vascular procedures with a direct order.

Rationale:

The guiding principle for this opinion is that sheath removal, manual compression, the use of mechanical compression devices, and deployment of vascular closure devices can be safely performed by a registered nurse with specialized training, skills, and knowledge.

The use of a suture mediated, extravascular clip or invasive compression assist closure device can present complications which are outside the scope of practice of a non-advanced practice RN to manage. Therefore, use of such devices is not within an RN scope of practice to deploy.

General Requirements:

1. The agency/employer maintains written policies and procedures.
2. Licensed Independent Provider's (LIP) order is obtained for plug based vascular closure devices and a LIP is readily available to manage complications related to deployment of vascular closure devices.
3. Only RNs who have satisfactorily completed an instructional program and have supervised clinical practice with return demonstration are allowed to remove sheath, apply manual compression or mechanical compression devices, and deploy vascular closure devices.
4. Documentation of satisfactory completion of an instructional program and supervised clinical practice is on file with the agency/employer.
5. A periodic educational/competency validation mechanism is developed, and documentation of the successful demonstration of knowledge, skills, and abilities is on file for each nurse performing the procedures.

Course of Instruction

Provides didactic and classroom instruction followed by supervised clinical practice that includes but is not limited to:

1. Anatomy and physiology related to femoral artery, vein, nerves, and groin area structures.
2. Indications and contraindications of compression devices and deployment of vascular closure devices.
3. Demonstrated knowledge of potential adverse reactions and management of complications.
4. Sterile technique.
5. Cognitive and psychomotor skills necessary to deploy vascular closure devices.
6. The RN's responsibility in the event of untoward reaction or life-threatening complications.

7. For collagen vascular closure deployment: Supervised clinical practice with demonstration of successful deployments, including patients who have received anticoagulant therapy.

References

- Rao, S., & Agasthi, P. (2022, June 6). Femoral vascular closure devices after catheterization procedure. *StatPearls*. <https://www.ncbi.nlm.nih.gov/books/NBK557472>
- Schwartz, B., Burstein, S., Economides, C., Kloner, R., Shavelle, D., & Mayeda, G. (2011, July). Review of Vascular Closure Devices. *Cath Lab Digest*, 19(7), 1,10-20. <https://www.hmpgloballlearningnetwork.com/site/cathlab/articles/review-vascular-closure-devices>