

# I need H.E.L.P! Engage your team

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## Percutaneous Access Site Management Seminar October 2019



Educating nurses about closure devices

## Introduction

Preventing complications from happening relies on a precise and holistic assessment, including diligent monitoring and focus on the intervention at hand. The implementation of educational programs promoted by a need identified by the UPMC Hamot Cath Lab director and Cath Lab process team. There has been an increase in readmission rates and percutaneous access site complications.

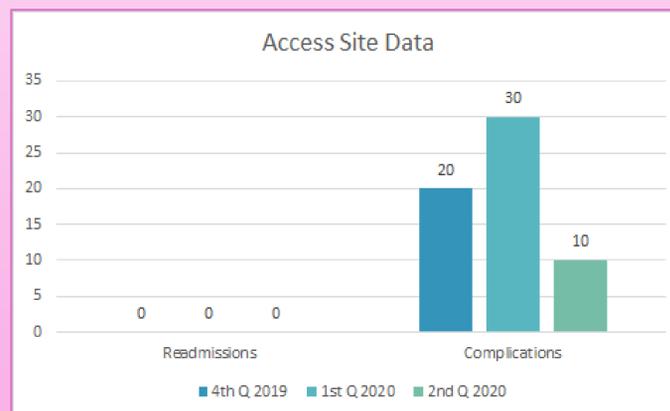


## Methodology

Monthly review of 10 random cardiac catheterization charts to assess for access site complications. Monitor for readmissions secondary to problems at percutaneous access site. Cardiologists, advanced care practitioners, Cath lab staff, and nurses worked together to prevent and treat complications along with reducing readmissions. A collaborated team has presented at the Percutaneous Access Site Management Seminars for four years to nursing staff, previously this presentation was titled "Groin Management Seminar".

## Results

Upon our own collection of data starting in October 2019, there was no readmissions related to percutaneous access site complications. Complications can include oozing or bleeding from the site, infection, hematoma, fistula, necrosis, retroperitoneal bleed, obstruction in circulation to the affected extremity, and pseudoaneurysm.



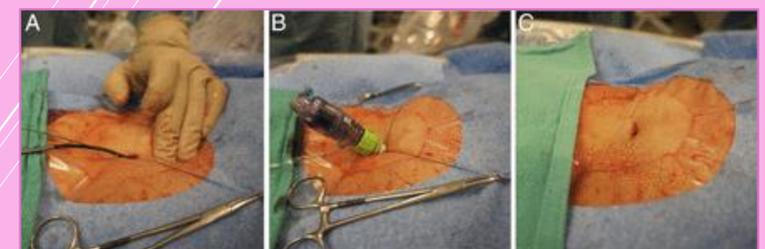
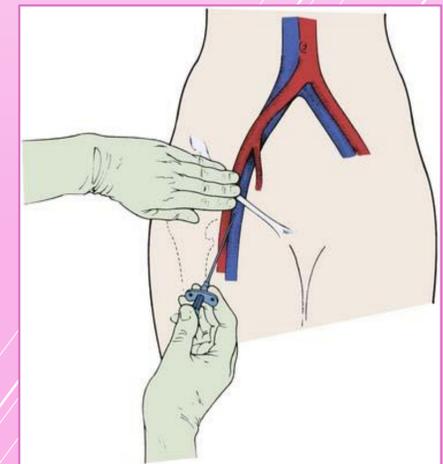
In reviewing 10 charts per month, 30 charts in total per Quarter, the most common complications found are as follows: bleeding, dressing not removed within 24 hours of procedure (high risk for infection), hematoma, retroperitoneal bleed and pulseless extremity. As shown on the graph the 4th Quarter of 2019 there was 20% complication rate with 30% in the 1st Quarter of 2020. We would like to note, there was a significant decrease of the patient census and no elective procedures performed in half of the 2nd Quarter of 2020, allowing for only 10% complication rate during the COVID pandemic.

## Discussion

The lack of data from 2019 has empowered us to conduct our own research on post percutaneous access sites and readmissions in relation to complications caused by percutaneous access. Access site complications lead to longer periods of hospitalization, additional treatments, and higher costs, in addition to being associated with increased morbidity and mortality (Means, End, & Kaul, 2017). In the face of these negative outcomes, complications must be identified and monitored to prevent, minimize or resolve potential harm to patients (Reich et al., 2017). Our goal is to educate nursing staff on percutaneous access procedures with the outcome of decreasing readmission rates and post-procedure complications. Identification and knowledge of the access site is the foundational framework to access site management.

## Conclusion

The objective of our educational opportunity and hands-on learning at the Percutaneous Access Site Management Seminar, which includes physicians, nurses, and advanced practice practitioners, is to disseminate knowledge and improve patient outcomes. With the lack of readily available outcome data, there is a knowledge gap which translates to a potential for poor patient outcomes. In tracking our own complications, we will be able to identify education requirements that will shape an access site team that provides high quality care.



## References

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- Reich, R., Rabelo-Silva E. R, Santos, S.M., & Almeida, M.A. (2017). Vascular access complications in patients undergoing percutaneous procedures in hemodynamics: A scoping review. *Integrative Review*, 38(4)1- doi:10.1590/1983-1447.2017.04.68716

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