



QUINTE HEALTHCARE CORPORATION

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Nursing – Peripheral Nerve Stimulation/Train of Four (TOF) Monitoring

Title: Nursing – Peripheral Nerve Stimulation Train of Four (TOF) Monitoring		Policy No:	3.16.2
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Manual:	Clinical	Approval Date:	February 2020
		Policy Lead:	Critical Care Manager
Department:	Nursing		
Approved By:	Interprofessional Practice Committee, Critical Care		

1. PURPOSE

The purpose of this policy is to identify the certification process required for critical care Registered Nurses (RNs) working at QHC to perform Train of Four (TOF) monitoring in the clinical setting.

2. SCOPE

RNs who have met the educational and competency requirements and who work in the Intensive Care Unit (ICU) at QHC may perform Train of Four monitoring.

3. POLICY

Peripheral Nerve Stimulation (PNS) is a method used to objectively monitor the degree of neuromuscular blockade in patients receiving neuromuscular blocking agents (NMBAs). TOF is one acceptable approach to PNS monitoring and helps to ensure accurate monitoring to decrease avoidable side effects during NMBA administration such as unwanted movement, prolonged paralysis, and delayed recovery from drug or metabolite accumulation.

RNs working in the ICU at QHC often care for patients who are receiving NMBAs. The ability to competently assess the degree of neuromuscular blockade for these patients is a critically important part of providing safe, ethical care. TOF monitoring is an extended skill that RNs must be certified to perform independently in the clinical setting. If the need for re-training in TOF monitoring theory or clinical application arises, the certified RN must contact their unit Clinical Educator, Manager or Delegate.

4. PROCEDURE

RNs working in the Intensive Care Unit at QHC will successfully complete the following steps to be certified to independently perform Train of Four monitoring:

1. Review the Nursing Resource Manual entitled Peripheral Nerve Stimulation/Train of Four (TOF) Monitoring located on the QHC Intranet under Interprofessional Resources/Resource Manuals
2. Successfully complete of Peripheral Nerve Stimulation – Train of Four Certification Test with a pass mark of 80% (Appendix A of the Resource Manual).
3. Observe and assist a Mentor (another QHC RN who is certified in TOF monitoring) with initiating and assessing during TOF monitoring.
4. Complete one successful return demonstration of the procedure and completion of the checklist with Mentor, Unit Clinical Educator or Designate. (Appendix B of the Resource Manual).

APPENDICES AND REFERENCES

References:

- Ghai, B., Kaur, J. & Wig, J. (2006). Neuromuscular monitoring: A review. *Journal of Anaesthesia and Clinical Pharmacology* 22(4). 347-356.
- Guam Memorial Hospital Authority (2018). Policy – Neuromuscular Blocking Agents or Paralytics and Train of Four Monitoring. Nursing Services Manual.
- Kingston General Hospital (2004). Nursing Procedure: Peripheral Nerve Stimulation.
- Kingston General Hospital Critical Care Program (2007). Train of Four: Evaluation of patients medically paralyzed power point presentation.
- Saenz, A., Spencer, D. (2015) Peripheral Nerve Stimulator – Train of Four Monitoring. Medscape. Retrieved from <https://emedicine.medscape.com/article/2009530-overview>
- Quinte Healthcare Corporation (2019). Peripheral Nerve Stimulation/Train of Four Monitoring. Interprofessional Resource Manual.