Optimal dosage and timing of Thymoglobulin is imperative for the prophylaxis and treatment of acute rejection in renal transplant patients. Therefore, the intravenous (IV) infusion of Thymoglobulin via pump requires constant vigilance.

While Smart pumps have enhanced nursing practice, staff over-reliance on technology has contributed to infusion safety incidents, and near misses (Grissinger, 2019).

Infusion safety intervention bundle has proven successful at reducing medication errors (Schnock et al, 2018).

A care bundle addressing safety measures related to medication administration, documentation and clinical alarm management was developed to prevent Thymoglobulin infusion errors in the immediate postoperative period:

- P – Kidney transplant recipients
- I – Standardized care bundle
- C – Individual interventions
- O – Optimize Thymoglobulin Administration

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Staff in-services, and one-on-one education was provided to Post-Anesthesia Care Unit (PACU) RNs on the importance of the interventions in the Thymoglobulin care bundle outlined below.

Data on compliance with the care bundle was collected pre and post in-service from May-October through direct observation, patients’ chart audits pre and post in-service, and staff surveys.

Chart audits revealed that post in-service 91% of the charts demonstrated all the documentation elements of the care bundle, versus 11% pre in-service.

Post in-service survey results showed that 80% of RNs performed infusion pump alarm checks, versus 20% pre in-service survey results.

Direct observations revealed post in-service 100% of RNs used infusion pump drug library selecting Thymoglobulin versus 88% pre in-service.

Infusion pump technology alone cannot fully prevent IV infusion errors. Infusion pumps carry a risk of not working correctly, and nurses must mitigate this risk by ensuring the safety and effective performance of these devices.

The care bundle significantly improved documentation and clinical practice regarding Thymoglobulin administration, including management of infusion pump alarms.

References