

BEWARE! Live Virus in Oncologic Therapy: Talimogen Laherparepvec (TVEC) and Nursing Considerations

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Background

Melanoma is the most common form of skin cancer. According to the American Cancer Society, melanoma accounts for 76.380 estimated diagnosed new cases and 10.130 deaths in the United States each year.

With the increasing numbers of melanoma cases, a new oncolytic drug named Talimogene laherparepvec (TVEC) was recently approved by the Food and Drug Administration (FDA) for use in the local treatment of melanoma tumors that are recurrent after initial surgery.

TVEC contains an attenuated live herpes simplex 1 virus, which is genetically modified to replicate inside tumors causing rapid oncolysis. The knowledge and education of TVEC administration and proper handling is important to the nursing staff, patients, and caregivers.

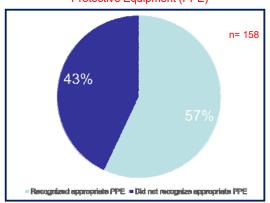
Objectives

- Assess the level of knowledge among Post Anesthesia Care Unit (PACU) nurses in regards to TVEC therapy.
- Review characteristics of TVEC and safety implications.
- Improve nursing knowledge about administration and proper handling of the TVEC medication.

Implementation

- A nursing survey was given to 158 PACU nurses to assess their knowledge level on TVEC, proper administration, safe handling, and patient education.
- Based on the nurses responses, 43% of the nurses failed to recognize appropriate personal protective equipment (PPE), safe handling of the medication, and patient education.
- · A PowerPoint educational module was developed and presented using the teach back methodology. The education addressed the areas where nurses were deficient of information about TVEC therapy.

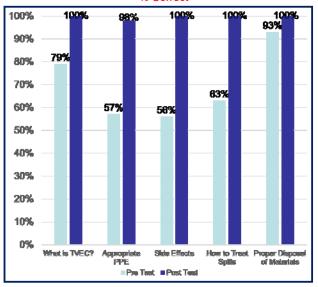
Pre Education of Appropriate Personal Protective Equipment (PPE)



Results

- A posttest questionnaire was administered to the same 158 PACU nurses to assess their knowledge regarding TVEC.
- Overall, the nurses' knowledge increased from 56% to 100% based on data collection.
- In addition, standard infection control specific to patients who will receive TVEC treatment was identified with the support of our institution's infection control and employee health teams.

Post Education Data Collection % Correct



Implications for Nursing

In a large oncology teaching institution, many patients receive medications and therapies not common in the clinical setting.

The identification and knowledge about TVEC administration and safety is important to increase nursing knowledge and prevent accidental exposure or nosocomial infection acquired from a live herpes simplex 1 virus in oncologic therapy.

Future Considerations

- o Reassess nursing knowledge on a yearly basis to assess TVEC nursing knowledge.
- Provide TVEC education to new hires and include in unit based nursing orientation.
- Review and collaborate with nursing education regarding any changes to nursing considerations related to post TVEC administration and nursing interventions.

Acknowledgements

TPACU/P3 NON OR/PACU Nursing Teams

