Radiation Oncology – Fulfilling a Need for Research, Education, and Practice: Effectiveness of Calendula Lotion for Radiation Dermatitis

Jennifer Bergenstock, RN BSN OCN, Sandra Frey, RN MSN OCN, Erin Light, RN BSN OCN, Kathy Krause, RN OCN, Sue Lewis, RN OCN, Marisa Kauker, RN BSN OCN, Jenna Byorek, RN BSN, Debra Knappenberger, RN OCN, Mary Konek, RN OCN, Ruth Ocasio, LPN; Mary Lenahan Durnin, RN MSN OCN, Charles Andrews, MD, Jeanette Blauth, MD, Alyson McIntosh, MD, Steven Perch, MD, Robert Prosnitz, MD MPH, Dennis Sopka, MD, Clinton Leinweber, DO, Tracy Kichline, Data Systems Analysis, Mandy Hendricks, RN MSN OCN

Lehigh Valley Health Network, Allentown, Pennsylvania

Background

- Historically, patients would receive a Beta-Val prescription at initial consultation visit or at first signs of radiodermatitis
- After return from Oncology Nursing Society (ONS) Congress, nurses proposed a pilot study in 2013, evaluating a group of 63 breast cancer patients through seven weeks of skin toxicity assessments

Objectives

- To implement a practice change for topical agent intervention of radiodermatitis in the radiation oncology setting.
- To evaluate the effectiveness of Calendula lotion for radiodermatitis in breast cancer patients for a seven week period during routine skin toxicity assessments.

Methods

- The breast cancer patients were given an information sheet describing radiodermatitis, instructions for application of Calendula, and price information.
- Weekly skin toxicity assessments were performed for seven weeks.
- Nurses collaborated with radiation oncologist as needed for additional topical treatments as necessary.
- 47 patients used the Calendula lotion as recommended.
- Beta-Val was avoided in 18 out of 63 patients.

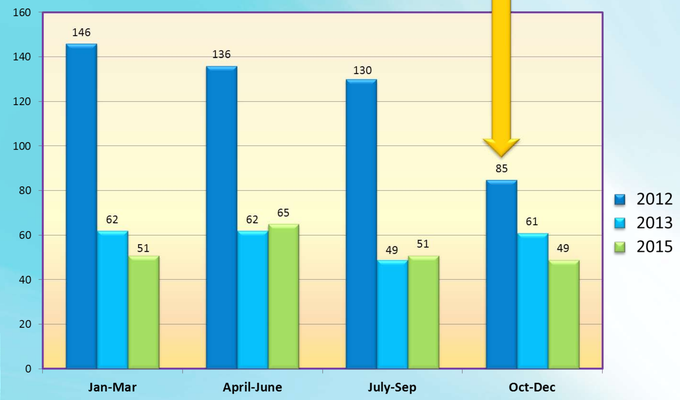
Recommendations for Practice

- Implement updated nursing process, patient education, and coordination of care with the radiation oncologists prescribing lotions for skin toxicities for population of patients with lung, head & neck, brain, and breast malignancies.

LVHN Radiation Oncology - Radiodermatitis

	Patients Receiving Beta-Val			
	Jan-Mar	April-June	July-Sep	Oct-Dec
2012	146	136	130	85
2013	62	62	49	61
2014	51	65	51	49

Calendula Nursing Process Initiated: November/December 2012



Translation: The Switch to Calendula

Decrease in number of Beta-Val prescriptions as inverse measurement of Calendula lotion prescribed:

- 2012 – 476/1,475 new treatments = 32%
- 2013 – 232/1,162 new treatments = 20%
- 2014 – 215/1195 new treatments = 18%

The radiation oncology team proposed that use of Calendula lotion may prevent radiodermatitis longer than other topical therapies...

...To study the hypothesis, the data was again reviewed looking for time Beta-Cal prescribed compared to initial consultation visit:

- 2012 – average number of days from initial consult to Beta-Val prescription = 16.28 days
- 2014 – average number of days from initial consult to Beta-Val prescription = 27.52 days

Conclusion

- Specialty of oncology is ever-changing
- Important to promote research into practice
- With support of radiation oncology department at Lehigh Valley Health Network, the radiation oncology nurses implemented a practice change by promoting evidenced-based practice through research, education, and the nursing process.
- **These results indicate:**
  - **Beta-Val prescriptions have been avoided with use of Calendula lotion**
  - **Calendula lotion may delay the use of Beta-Val in patients with radiodermatitis**

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