

Understanding Side Effects and Immune Related Adverse Events (IrAEs) of Cancer Therapies

BACKGROUND

- Adverse effects of cancer therapies vary based upon the drugs and treatment modalities used.
- Side effects/adverse events associated with chemotherapy are much different than immune related adverse events (IrAEs).
- The major adverse events associated with immunotherapy are 'itis' which may mimic signs associated with neutropenic-associated infection.
- Early recognition of adverse events leads to improved outcomes and decreased hospitalizations.

PROBLEM STATEMENT/PURPOSE

- Many patients receive immunotherapy as a part of their cancer treatment.
- Earlier research conducted at St. Joseph Hospital Orange identified nursing knowledge deficits regarding immunotherapy and IrAEs.
- This project measures the efficacy of micro-education as an effective method to educate nurses about IrAEs.

REFERENCES

References available upon request:
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METHODS

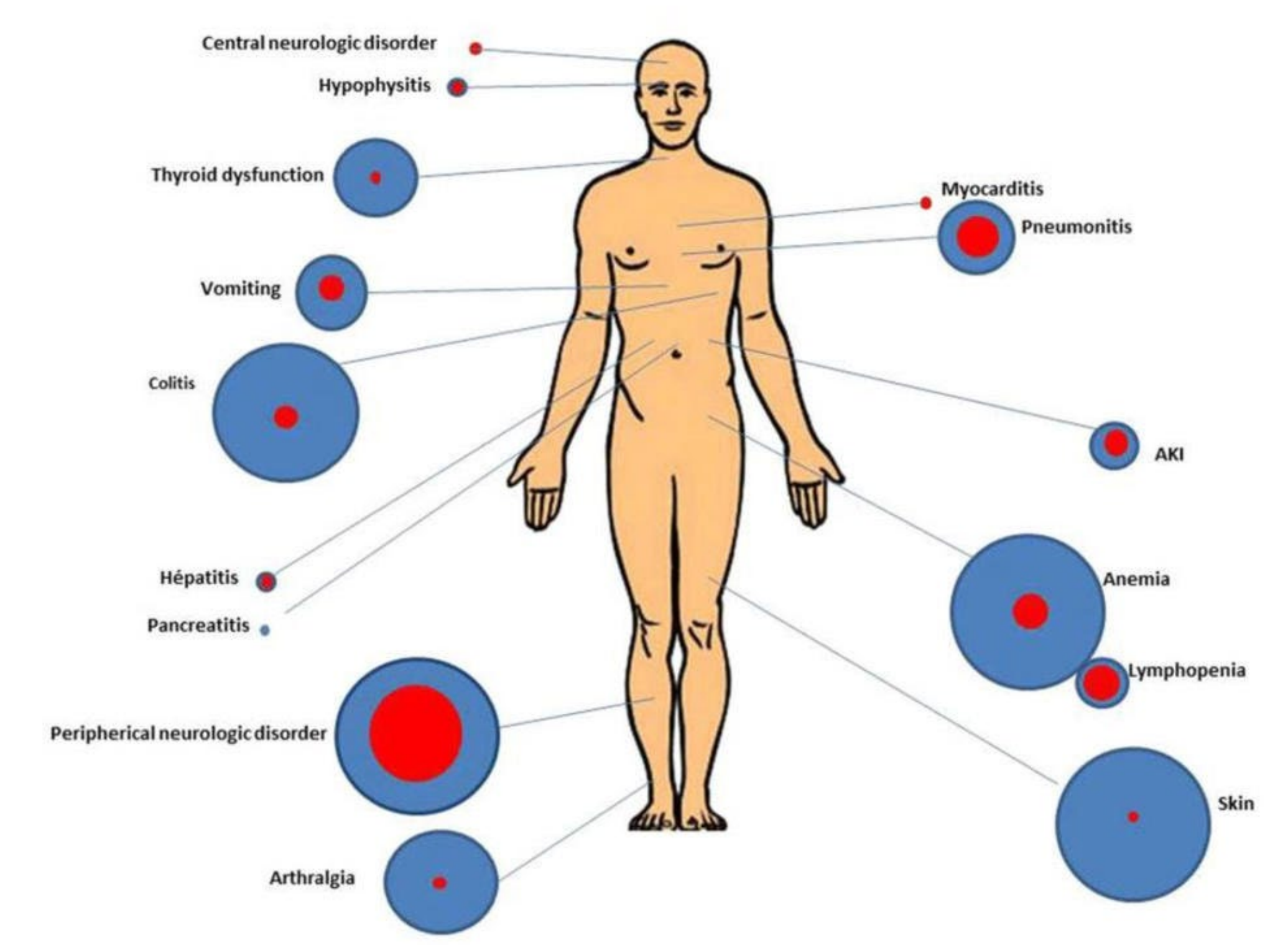
- Design: Evidence-based quality improvement project.
- Sample: Inpatient/Outpatient Oncology & float Pool RNs.
- Methods:
 - Identical pretest/posttest.
 - Pretest measures nursing knowledge of immunotherapy versus chemotherapy.
 - Microteaching: focusing on immunotherapy's method of action and differentiating between adverse events associated with chemotherapy versus immunotherapy.
 - Posttest immediately after teaching.

RESULTS

	Pre N = 29		Post N = 29		P - value
	Yes	No	Yes	No	
Are the side effects of chemotherapy the same as the adverse events of immunotherapy?	27.6% (8)	69.0% (20)	6.9% (2)	93.1% (27)	< .001
Are you familiar with the drug used to manage moderate to severe cases of immune related adverse events, (IrAE's)?	48.3% (14)	48.3% (14)	86.2% (25)	13.8% (4)	.060
Are you comfortable recognizing side effects/adverse events on patients who are/have been on treatment for cancer?	75.9% (22)	20.7% (6)	100.0% (29)	0.0% (0)	.083

RESULTS (continued)

- Correct number of chemotherapy side effects / adverse effects from cancer treatments pre-education: mean of 3.7 (SD = .6), post-education: mean 3.9 (SD = .3). p < .0001.
- Correct number of immunotherapy side effects / adverse effects from treatments pre-education: mean of .03 (SD = .2), post-education: mean 0.07 (SD = .3) p < .0001.



CONCLUSIONS

- Oncology nurses were knowledgeable about side effects of chemotherapy before education but benefited from microteaching about IrAEs.
- Education specific to immunotherapy and IrAEs is essential for any RN who may be caring for a patient who is receiving immunotherapy.
- Extend teaching about IrAEs to include inpatient nurses throughout the hospital.