



A PROSPECTIVE COMPARISON OF ACUTE TOXICITIES IN POST MASTECTOMY RADIATION THERAPY WITH AND WITHOUT IMMEDIATE IMPLANT BASED RECONSTRUCTION - A TERTAIRY CARE EXPERIENCE

Sarah Akhtar, Fabiha Shakeel, Kaynat Siddiqui, Laraib Khan, Maria Tariq, Nasir Ali | Section of Radiation Oncology, Department of Oncology

CLINICAL QUESTION

Can modern PMRT be delivered after immediate implant-based reconstruction without adding clinically meaningful acute toxicity?

CONTEXT & METHODS

- Implant-based reconstruction remains widely used.
- Modern PMRT with IMRT/VMAT may reduce historical radiation-related toxicity.
- Prospective pilot cohort; endpoints were dermatitis, esophagitis, lymphedema and implant disfigurement.

STUDY COHORT

15 patients

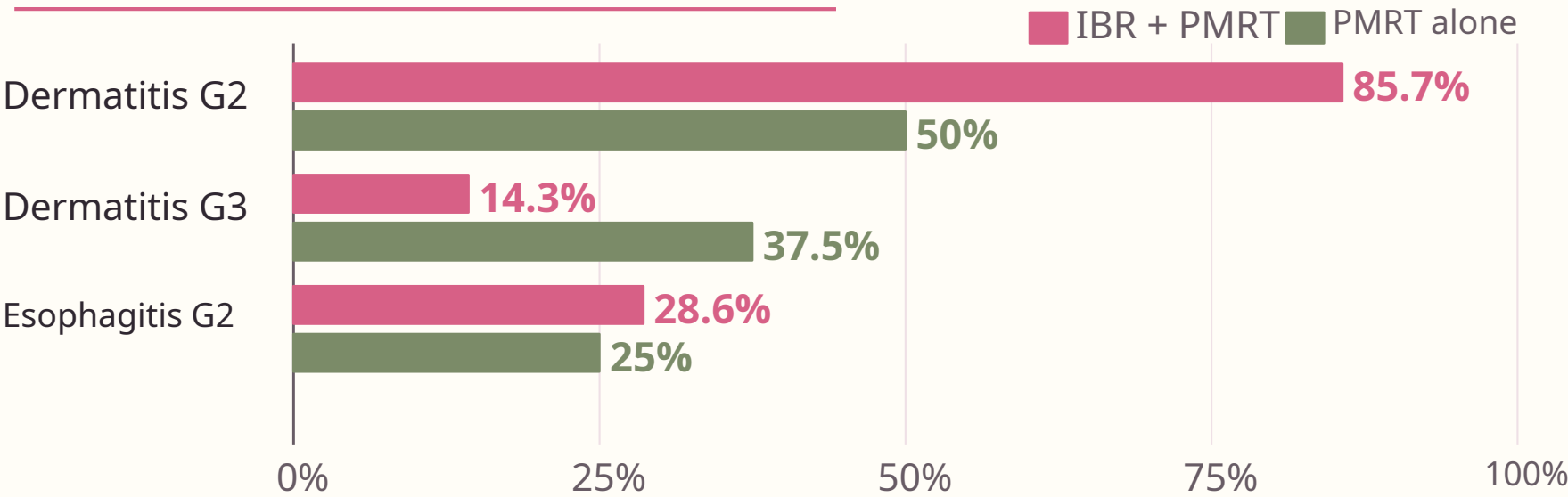
7
IBR + PMRT

8
PMRT alone

100% received IMRT/VMAT

COMPARATIVE ACUTE TOXICITY

Reconstruction + PMRT vs PMRT alone



OVERALL TOXICITY PROFILE

Dermatitis	G2 66.7%	G3 26.7%	G4 6.7%
Esophagitis	G0 20%	G1 53.3%	G2 26.7%
Lymphedema	G0 40%	G1 60%	No Grade >2

All patients received IMRT/VMAT.

IMPLANT-RELATED OUTCOME

85.7%

Grade 1 implant disfigurement; no Grade 2-4 events in reconstructed patients.

INTERPRETATION & CONCLUSION

- No statistically significant increase in dermatitis or esophagitis with immediate reconstruction.
- Severe lymphedema was not seen.
- PMRT was feasible using modern IMRT/VMAT.

Take-home: In this prospective pilot cohort (n=15), PMRT after immediate implant-based reconstruction was feasible with modern IMRT/VMAT and did not show added statistically significant acute toxicity.