

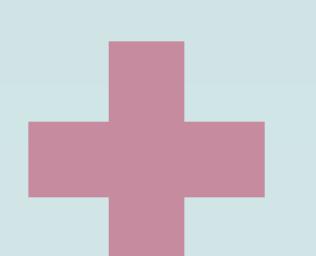
# Acute and Chronic Skin Toxicity Associated with Ultra-Hypofractionated Radiotherapy in Breast Cancer

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## Introduction

Adjuvant radiation therapy reduces the risk of local recurrence in breast cancer patients.

- Milan Trial
- NSABP B-06 Trial



- Meta-analyses
- EBCTCG 2005
- EBCTCG 2011

Adjuvant radiation therapy proves to be beneficial in Ca breast

Breast cancer accounts for **22.2% of all cancers** in Pakistan from registry data 1994-2021.

**Conventional fractionation**  
- 50 Gy / 25 fx  
NSABP B-06

**Hypofractionation**  
- RMH/GOC  
- Start A & B Trial  
- Canadian OCOG

**Ultrahypofractionation**  
- FAST Trial  
- FAST-Forward Trial

## Objectives

- This study evaluated the acute and chronic skin toxicities associated with a 1-week, 5-fraction breast radiotherapy regimen with or without boost.

## Methods

This study was conducted at Zareen Cancer & Research Center, ZUH.

- Acute and chronic skin toxicities were assessed according to **CTCAE v5**.
- Patients who had **at least 12 months** of follow-up were evaluated for chronic skin toxicity.

Patients completed treatment between 2022 and 2025.

13 patients who met the set criteria were included

\* Patient data extracted from medical record files.

\* Data assessed for treatment related skin toxicity occurrence.

- Inclusion Criteria
  - \* Breast Cancer Patients
  - \* Received 26 Gy in 5 fractions (with or without boost)
  - \* Completed treatment with proper follow ups

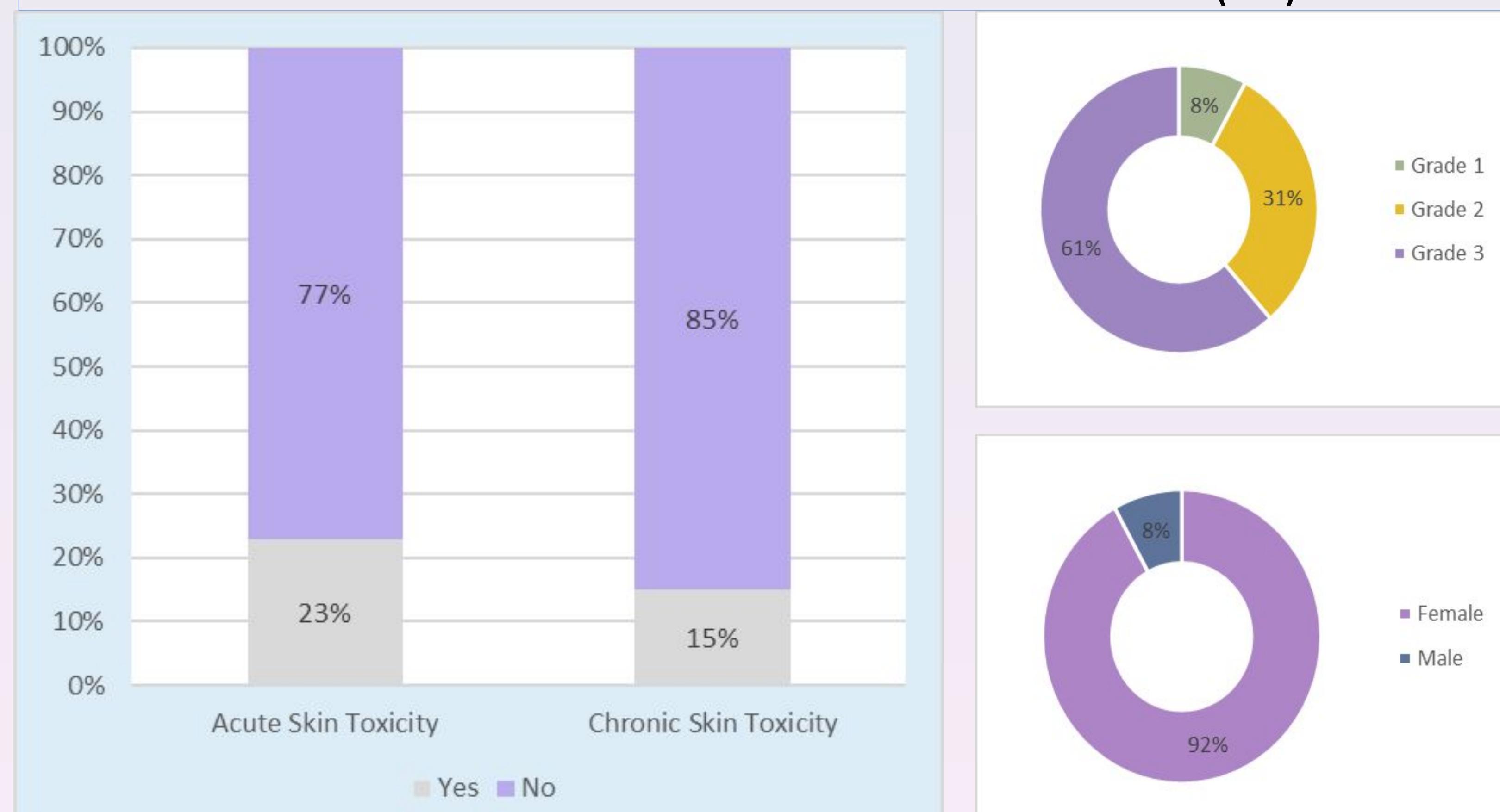
- All included patients received 26 Gy in 5 fractions.
- A Boost dose of 1000 Gy in 5 fractions was used where necessary.

## Results

- Grade 1-2 acute dermatitis occurred in → 23% of patients.
- None of the patients reported any grade 3 or 4 dermatitis.
- Chronic skin toxicity was evaluated in 69% of patients.
- Mild skin hyperpigmentation** was the only chronic adverse effect manifested.

Variable	Median (IQR)
Age (years)	52 (47–65)
Follow-up (months)	19 (4.5–25)

Variables	Category	n (%)
Diagnosis	Ca Right Breast	7 (54)
	Ca Left Breast	6 (46)
ER	Positive	7 (54)
	Negative	6 (46)
PR	Positive	7 (54)
	Negative	6 (46)
Her2 Neu	Positive	1 (8)
	Negative	12 (92)
Neo-adjuvant Chemotherapy	Yes	7 (54)
	No	6 (46)
Boost Fractions	Yes	3 (23)
	No	10 (77)
Heart V7 Gy < 5%	Yes	9 (69)
	No	4 (31)
Heart V1.5 Gy < 30%	Yes	7 (54)
	No	6 (46)
Ipsilateral Lung V8 Gy < 15%	Yes	4 (31)
	No	9 (69)



## Conclusion

- Ultra-hypofractionated breast radiotherapy appears to be a safe and feasible approach.
- Both acute and late skin toxicities remained within acceptable limits, in our limited patient cohort, even when followed by a boost.