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220P HYPOFRACTIONATED RADIOTHERAPY FOR LOCALLY ADVANCED STAGE T4 BREAST CANCER: SAFETY AND EFFICACY

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Background:

To assess early outcomes and safety of hypofractionated radiotherapy (RT) in non-metastatic locally advanced stage T4 breast cancer

Methods:

Fifty patients irradiated with 3D conformal hypofractionated RT (40 Gy delivered in 15 daily fractions of 2.67 Gy +/- additional boost of 13.35 Gy), for non-metastatic stage T4 breast cancer (BC) were retrospectively evaluated.
Disease free survival, metastasis free survival, acute and late radiation induced toxicity were evaluated.

Results:

Mean age at diagnosis was 53 years.
Thirteen patients had inflammatory BC and 37 had stage T4b BC.
Mastectomy was performed for 96% of patients.
Regional lymph nodes irradiation was performed in 94% of cases. Additional boost to the thoracic wall/tumor bed was delivered in 40% of cases.

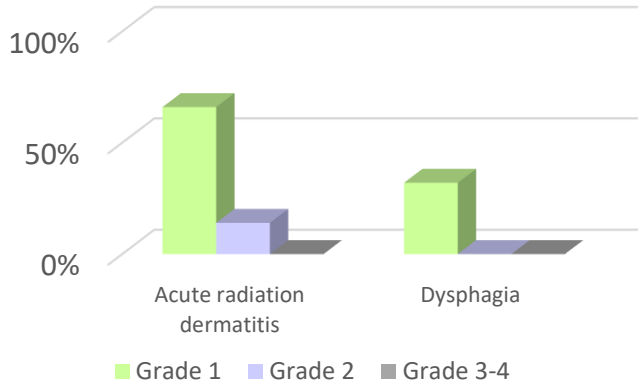

Figure 1 : Acute toxicity of hypofractionated RT

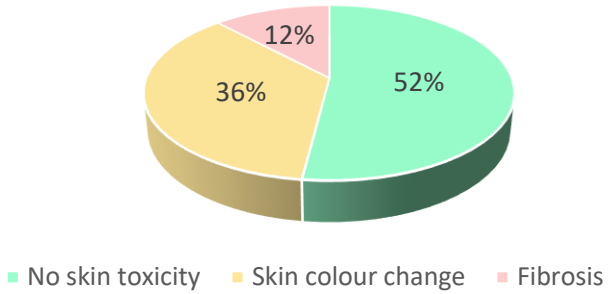

Figure 2: Late radiation induced skin toxicty

Local recurrence was observed in 4 women. The mean time to local failure was 13 months

Disease free survival at 36 months was 87.8% whereas metastasis free survival was 82.8%.

Table 1 : Early outcomes of hypofractionated RT

Local recurrence	8%
Distant metastatic failure	18%

Conclusion:

Early outcomes of hypofractionated radiotherapy for stage T4 breast cancer seemed comparable to conventional BC RT.

Considering the important socio-economic impact, this may encourage its use in low middle income countries.

Nonetheless, safety and efficacy of hypofractionated radiotherapy in locally advanced breast cancer need to be further studied in larger cohort.