StrataXRT for the prevention of radiation dermatitis in large breasted women treated in the prone position

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Introduction

- Large-breasted women have a high risk of radiation dermatitis (RD) during breast radiation therapy *(77% and 8% developed Grade 2 and 3 RD using moisturizer, respectively)*.
- The objective of this study is to prospectively evaluate the acute skin toxicity of these patients who applied StrataXRT (a silicone-based film-forming gel to prevent RD) while undergoing adjuvant breast radiotherapy (RT) in the prone position.

Methods

- A single-arm prospective study was conducted with patients receiving conventional or hypofractionated radiotherapy to the breast (40 or D) in the prone position.
- StrataXRT was applied twice daily to the radiated breast from the start of RT until 2 weeks post-RT.
- Skin toxicities were assessed using CTCAE grading, the Radiation Induced Skin Assessment Scale (RISRAS), and the Skin Symptom Assessment (SSA).
- Patients were assessed weekly with a photo taken at baseline, the last day of RT, and 2 weeks post-RT.
  - Patients were then contacted by phone monthly until 3 months post-RT to complete the SSA and patient-reported component of the RISRAS.

Results

- Thirty patients aged 40 to 68 years were enrolled, all receiving radiation of 40 Gy in 15 fractions, with eighteen patients receiving a boost.
  - **Fifteen patients (50%) developed CTCAE Grade 2 RD and none developed Grade 3 RD.**
- Compared to baseline, the SSA and RISRAS scores were worse at the 2-week follow-up.
  - **Patients reported pruritus, pain, pigmentation, and blistering as the most severe symptoms on the SSA, and pain and itchiness on the RISRAS.**
  - Patients at 3 months post-RT had most symptoms resolved except for pigmentation, which was the most commonly persisting symptom.
- No adverse side effects occurred due to StrataXRT.

Conclusion

- StrataXRT is effective in preventing Grade 3 RD and is safe in large breasted patients treated in the prone position.
  - Further randomized studies would be recommended to confirm our findings.

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