



Modern radiotherapy with volumetric modulated arc therapy (VMAT) for extensive skin field cancerization (ESFC) – efficacy and toxicity outcomes at 12 months (12738)

Background: Extensive Skin Field Cancerisation (ESFC) is more common in the older population group¹. The incidence increases with age, particularly in the immunosuppressed². Non-melanoma Skin Cancers (NMSC) can arise in field and, with associated comorbidities, can make definitive treatment difficult. The durability of traditional topical field treatments is disappointing³. New radiation therapy (RT) techniques including Volumetric Modulated Arc Therapy (VMAT) has allowed definitive radiation therapy to large convex fields

(e.g., scalp, forehead, cheeks, forearms and legs)⁴. This is a study of efficacy and toxicity outcomes at 12 months.

Method: Charts were reviewed of patients treated with VMAT for ESFC by one clinician across three treatment locations. Toxicity was recorded using Common Terminology Criteria for Adverse Event (CTCAE) Version 5. Efficacy of in-field control at 12 months was recorded from clinical observation.

Results: 101 fields had been treated since instigation of the new technique to December 2019. No toxicities greater than grade 3 (CTCAE Dermatitis Radiation) occurred. At 12 months, good or excellent cosmesis has been demonstrated in 96% of areas treated, with continuing complete response of 86%.

Conclusion: This retrospective study provides further evidence that VMAT is effective in ESFC, with acceptable toxicity. Prospective studies, especially randomized studies comparing VMAT with topical treatments are needed for this more commonly occurring problem.

References

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