



PHOTOBIMODULATION THERAPY FOR THE MANAGEMENT OF RADIODERMATITIS IN HEAD AND NECK IRRADIATED AREA: A CASE SERIES

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Introduction

- Acute radiodermatitis (ARD) is an inflammatory skin toxicity that frequently occurs in oncology patients [1-3]
- Photobiomodulation therapy (PBMT) modulates inflammation, alleviates pain, and promotes tissue regeneration [4-5]

Methods

- Case series
- CARE guideline [6]

Case Series



(A1) Patient 1 before PBMT: A 91-year-old male patient with cutaneous squamous cell carcinoma in face, treated with 50 Gy in 20 fractions of RT, presented with necrosis in the right hemiface



(A2) Patient 1 after finished PBMT: Resolution of necrosis in mucous jugal after treatment with PBMT using red laser (0.5 J) and blue LED (5.2 J)



(B1) Patient 2 before PBMT: A 51-year-old female patient with basal carcinoma cell carcinoma in the nose, treated with 51 Gy in 17 fractions of RT, presented with ulceration



(B2) Patient 2 after finished PBMT: Resolution of ulceration after treatment with PBMT using red (1 J) and infrared (1.2 J) lasers



(C1) Patient 3 before PBMT: A 60-year-old male patient with oropharyngeal carcinoma, treated with 70 Gy in 35 fractions of RT, presented with moist desquamation



(C2) Patient 3 after finished PBMT: Resolution of moist desquamation after treatment using infrared (1.2 J) and red (1 J) lasers + amber (1 J) and blue (5.2 J) LEDs

Conclusion

- This case series described the clinical potential of PBMT to treat severe ARD in head and neck area
- Further clinical studies are needed

References

