

OPINION @ Open Access

Clinical Factors Associated with Adjuvant RT Usage

Matthew Stollman*

Department of Physiology, North-western University Feinberg School of Medicine, Chicago, USA

ARTICLE HISTORY

Received: 18-Jun-2024, Manuscript No. AJPBP-24-144294; Editor assigned: 20-Jun-2024, PreQC No. AJPBP-24-144294 (PQ);

Reviewed: 05-Jul-2024, QC No. AJPBP-24-144294;

Revised: 12-Jul-2024, Manuscript No. AJPBP-24-144294 (R);

Published: 19-Jul-2024

Description

Postoperative Radiation Therapy (RT) has traditionally been used sparingly for melanoma due to the belief that melanoma is radio-resistant. However, the ANZMTG 01.02/TROG 02.01 trial found that RT following lymphadenectomy for selected patients with node-positive melanoma may reduce the risk of loco regional recurrence. Although the role of RT in melanoma remains contentious, it has been established as a palliative treatment option for unrespectable melanoma.

Multiple factors influence a patient's eligibility for surgery, which is the primary treatment for melanoma. Achieving resection with completely negative margins may be difficult or impossible depending on the cancer's location. Other reasons for considering alternative melanoma treatment options include comorbidities, unrespectable disease, and patient preference. In these cases, RT can be considered a final treatment option when surgery is either not recommended or not possible. The effects of adjuvant RT on survival and loco regional control in melanoma have been investigated by several researchers. According to the NCCN 2023 Guidelines, patients with highrisk desmoplastic melanoma, those at high risk for regional recurrence after resection of the primary tumour, and patients with brain metastases may benefit from adjuvant RT. Despite some evidence of benefits, there is a lack of clinical framework to guide the use of RT in stage III melanoma, and the best dosing regimens are not well-established.

Adjuvant RT should likely be used in patients with a high risk of loco regional spread, unrespectable disease, and increased disease burden. Studies have found that patients with at least four positive lymph nodes were more likely to receive adjuvant RT, consistent with this hypothesis. In the ANZMTG 01.02/TROG 02.01 trial, patients were categorized based on the number of involved lymph nodes, indicating a significant clinical difference in the number of involved nodes. The trial's stratification by Extra-Capsular Extension (ECE) found that patients with ECE of nodal disease benefited the most from adjuvant RT.

Numerous studies have examined melanoma loco regional control conducted a retrospective review of 160 patients with cervical lymph node metastases from melanoma and found a 10-year regional control rate of 94% with adjuvant RT. Owens et al. observed a nonsignificant trend toward a lower rate of loco regional recurrence when comparing adjuvant RT to surgery alone in mucosal melanoma of the head and neck. Additionally, analysis indicated that patients with desmoplastic melanoma were more likely to receive adjuvant RT than those with other subtypes of melanoma found that adjuvant RT provided superior local control compared to surgery alone in a retrospective study of 130 patients with no metastatic desmoplastic melanoma. This finding supports the NCCN's recommendation to consider adjuvant RT in highrisk desmoplastic melanoma cases.

While studies did not find a clear connection between Charlson-Deyo score and receiving RT, the impact of comorbidities on melanoma treatment strategies warrants further investigation. RT may be considered a more viable treatment option for patients with greater disease burden and comorbidities, as these patients may be at higher risk for surgical complications.

This finding is consistent with this one. The NCCN's recommendation to consider adjuvant RT in cases

of high-risk desmoplastic melanoma is based on this finding. Studies did not find a clear connection between Charlson-Deyo score and receiving RT, but the impact of more comorbidities on melanoma treatment strategies warrants further investigation. RT may be considered a more viable treatment option for patients who have a greater disease burden and comorbidities because these patients may be thought to be at greater risk for surgical complications. Additionally, RT may benefit patients with high-risk desmoplastic melanoma, those at risk of regional recurrence post-resection, and those with brain metastases. Despite the lack of a standardized clinical framework for RT in stage III melanoma, ongoing studies highlight its potential in enhancing loco regional control and survival outcomes, underscoring the need for further investigation and refinement of dosing regimens.