Perspective

iMedPub Journals
www.imedpub.com

Journal of Neoplasm
ISSN 2576-3903

2024
Vol.9 No.2:75

The Integral Role of Radiotherapy in Head and Neck Cancer Management

Monel John*

Department of Oncology, Umea University, Umea, Sweden

Corresponding author: Monel John, Department of Oncology, Umea University, Umea, Sweden, E-mail: John_M@gmail.com

Received date: May 22, 2024, Manuscript No. IPJN-24-19398; **Editor assigned date:** May 25, 2024, PreQC No. IPJN-24-19398 (PQ); **Reviewed date:** June 08, 2024, QC No. IPJN-24-19398; **Revised date:** June 15, 2024, Manuscript No. IPJN-24-19398 (R); **Published date:** June 22, 2024, DOI: 10.36648/2576-3903.9.2.75

Citation: John M (2024) The Integral Role of Radiotherapy in Head and Neck Cancer Management. J Neoplasm Vol.9 No.2: 75.

Description

Radiotherapy, often in conjunction with chemotherapy, is pivotal in managing head and neck malignancies. However, it is associated with several adverse events, including oral mucositis, hyposalivation, loss of taste, dental caries, osteoradionecrosis and trismus, which significantly impact patients' quality of life. Therefore, implementing effective oral management strategies before the commencement of radiotherapy in patients with head and neck cancer is essential. Despite the critical need, there is no consensus protocol for oral management. This article to demonstrate that oral management strategies should include the removal of infected teeth before radiotherapy to prevent osteoradionecrosis, comprehensive oral care to prevent severe oral mucositis during radiotherapy and measures to prevent dental caries and subsequent osteoradionecrosis after radiotherapy.

Head and neck cancer

Head and neck cancers typically originate in the squamous cells that line the mucosal surfaces of the head and neck, such as those within the mouth, throat and voice box. A significant proportion of individuals with head and neck cancer present to their physicians with advanced-stage disease. This can be attributed to patient factors, such as delays in seeking medical care, or physician factors, such as delays in referral from primary care or non-diagnostic investigation results. Patients typically present with one or more common symptoms. These symptoms may be site-specific, such as a laryngeal tumor causing hoarseness, or non-site-specific, such as ear pain that can be caused by various types of head and neck cancers. Radiation therapy is the most common form of treatment for head and neck cancers. There are various forms of radiation therapy, including three-dimensional conformal radiation therapy, Intensity-Modulated Radiation Therapy (IMRT), particle beam therapy and brachytherapy, which are commonly used in treating head and neck cancers. Most patients with head and neck cancer treated in the United States and Europe receive IMRT using high-energy photons. However, higher doses of head and neck radiation are associated with thyroid dysfunction and pituitary axis dysfunction. Radiation therapy for head and neck cancers can also cause acute skin reactions of varying severity, which can be managed with topically applied creams.

Epithelial malignancies

Oral diseases can affect all oral and dentofacial structures, making the management of oral issues a comprehensive process that includes evaluation, diagnosis and treatment. Oral diseases can impact all oral and dentofacial tissues, including the hard tissues such as bone and teeth, as well as mucosal, pulpal, periodontal and glandular soft tissues. The majority of these epithelial malignancies are squamous cell carcinomas of the head and neck, with the primary risk factors being tobacco and alcohol consumption. Radiotherapy also plays a significant role in alleviating symptoms in patients with advanced or severe head and neck cancer by reducing tumor size, preventing ulceration, bleeding and controlling pain. However, radiotherapy to the head and neck area can cause undesirable changes in the surrounding tissues. Recently, high-precision radiotherapy techniques, such as IMRT, have been widely adopted due to their superior efficacy in minimizing side effects compared with three-dimensional conformal radiotherapy. While radiotherapy remains a cornerstone in the treatment of head and neck cancers, it is accompanied by significant adverse effects that can severely impact patients' quality of life. Hence, it is to implement comprehensive oral management strategies before, during and after radiotherapy to mitigate these adverse effects and improve patient outcomes. The development and adoption of consensus protocols for oral management in head and neck cancer patients undergoing radiotherapy are essential steps toward achieving this goal. Protection from dental caries might be upgraded by the utilization of effective fluorides; fluoride toothpaste has been shown to give critical advantage in forestalling and remineralising root caries in patients going through radiation for head and neck malignant growth. The adequacy of fluoride in these patients might be restricted by the absence of calcium and phosphate auxiliary to hyposalivation. Remineralization can't happen on the off chance that the spit needs adequate degrees of calcium and phosphate comparative with tooth minerals.