Editorial

iMedPub Journals
www.imedpub.com

Journal of Medical Physics and Applied Sciences
ISSN 2574-285x

2021
Vol.6 No.3:e011

Treatment Radiation Pneumonitis Observed in Patients Treated with Thoracic Radiotherapy

Hui Zhu*

Department of Radiation Oncology, University of California Pacific Medical Center, San Francisco, CA, USA

Correspondence to: Hui Zhu. Freitag, Department of Radiation Oncology, University of California Pacific Medical Center, San Francisco, CA, USA, Email: drzhuh@126.com

Received date: April 08, 2021; **Accepted date**: April 22, 2021; **Published date:** April 29, 2021

Citation Hui Z (2021) Treatment Radiation Pneumonitis Observed in Patients Treated with Thoracic Radiotherapy. J Med Phy Sci. 6:e011.

Description

Radiation pneumonitis is inflammation of the lung caused by radiation therapy to the chest. It most commonly develops 1 to 3 months after treatment is over, but it can happen up to 6 months after treatment. Chronic pneumonitis can lead to permanent scarring of the lungs (called pulmonary fibrosis).

Chemo-radiotherapy and systemic therapies have proven satisfactory outcomes as standard treatments for various thoracic malignancies; however, adverse pulmonary effects, like pneumonitis, can be life-threatening. Pneumonitis is caused by direct cytotoxic effect, oxidative stress, and immune-mediated injury. Radiotherapy Induced Lung Injury (RILI) encompasses two phases: an early phase known as Radiation Pneumonitis (RP), characterized by acute lung tissue inflammation as a result of exposure to radiation; and a late phase called Radiation Fibrosis (RF), a clinical syndrome that results from chronic pulmonary tissue damage. Currently, diagnoses are made by exclusion using clinical assessment and radiological findings. Pulmonary function tests have constituted a significant step in evaluating lung function status during radiotherapy and useful predictive tools to avoid complications or limit toxicity. Systemic corticosteroids are widely used to treat pneumonitis complications, but its use must be standardized, and consider in the prophylaxis setting given the fatal outcome of this adverse event. This review aims to discuss the clinicopathological features of pneumonitis and provide practical clinical recommendations for prevention, diagnosis, and management.

Radiation pneumonitis is more likely to happen when high doses of radiation are used or a large area of the lung is treated with radiation. Certain chemotherapy drugs, such as bleomycin (Blenoxane), cyclophosphamide (Procytox) and carmustine (BiCNU, BCNU), can also increase the risk of developing radiation pneumonitis if given along with radiation therapy.

If symptoms get worse or don't go away, report them to your doctor or healthcare team without waiting for your next scheduled appointment.Your doctor will try to find the cause of your symptoms. You may need to have the following tests:physical exam,chest x-ray,pulmonary function test,Managing radiation pneumonitisYour healthcare team may recommend medicines to treat radiation pneumonitis:decongestants,cough suppressants

Rest if you feel short of breath.,Drink more fluids and use a cool-air vaporizer or humidifier to keep the air moist,Use an extra pillow to raise your head and upper body while resting or sleeping,Avoid the outdoors on hot, humid days or very cold days (which can irritate the lungs),Wear light, loose-fitting tops and avoid anything tight around the neck, such as ties or shirt collars.