Case report

Stereotactic body radiotherapy for superior vena cava syndrome

Joshua T. McKenzie, Emory McTyre, Dan Kunaprayoon, Kevin P. Redmond

Abstract

Superior vena cava syndrome (SVCS) is characterized by a spectrum of clinical findings that result from the occlusion of the superior vena cava (SVC), usually caused by extracaval compression of the SVC by either a bronchogenic tumor or an enlarged mediastinal lymph node. Most efforts at treatment for SVCS are palliative, and long-term survival for malignancy-related SVCS is very low. Therefore, radiotherapy treatment is usually delivered with palliative intent utilizing hypofractionated regimens. The use of high dose per fraction may result in more rapid and more durable responses to treatment. Similarly, the high dose per fraction utilized in stereotactic body radiotherapy (SBRT) has been proven highly efficacious in treating early stage non-small cell lung cancer (NSCLC). Here we report the first reported case of a patient with SVCS from NSCLC successfully treated with SBRT to alleviate SVCS.

Keywords

Stereotactic; Superior vena cava syndrome; SBRT; SVCS