Case report

Radiotherapy and technetium-99m-labeled red blood cell scintigraphy for hemoptysis from chronic MRSA infection

Carminia Lapuz, Sandeep K. Gupta, Elizabeth A. Bennett, Colin I. Tang

Abstract

Aim

To discuss the application of external beam radiotherapy (EBRT) and technetium-99m-labeled red blood cell scintigraphy (LRBCS) in life-threatening hemoptysis from a non-malignant condition.

Materials and methods

This case report presents a patient with persistent hemoptysis secondary to chronic Methicillin-resistant Staphylococcus aureus (MRSA) infection in whom conventional management failed to localize the site of pulmonary bleeding or to provide effective therapy.

Results

EBRT was successfully given for life-threatening hemoptysis with improvement in quality of life for nearly 1 year. LRBCS was used to localize the source of further bleeding and facilitate targeted therapy.

Conclusion

EBRT can be an effective and well-tolerated modality in treating life-threatening hemoptysis refractory to conventional methods. LRBCS is a non-invasive diagnostic tool that can be used to detect the source of pulmonary bleeding.

Keywords

Hemoptysis; Radiotherapy; Technetium-99m-labeled red blood cell scintigraphy; MRSA pneumonia; Benign