Increased pulmonary FDG uptake in bleomycin-associated pneumonitis

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BACKGROUND: Bleomycin is an antineoplastic agent that is mainly used in combination regimens. Dose-limiting toxicity is the bleomycin-induced pneumonitis (BIP) that can be diagnosed by clinical and radiological findings. The early diagnosis of BIP is often challenging. CASE REPORT: We report the occurrence of a diffuse pulmonary increase of FDG uptake in the FDG-PET scan in association with suspected BIP in a patient treated for relapsed seminoma. A retroperitoneal relapse was treated with a combination chemotherapy containing cisplatin, etoposide, and bleomycin. After 3 cycles of this regimen the patient developed mild clinical signs of early BIP. A following FDG-PET in order to evaluate treatment response showed a diffuse increased FDG uptake of the right lung. The subsequent HRCT revealed pathological findings consistent with BIP. After cessation of bleomycin and a systemic steroid trial a prompt normalization of the abnormal radiological and clinical findings occurred together with a disappearance of the increased pulmonary FDG uptake.

CONCLUSION: FDG-PET can be used for evaluation of residual disease in patients treated for advanced seminoma. In cases of otherwise unexplained increased pulmonary FDG uptake in patients under treatment with bleomycin an evaluation for early BIP as a possible cause of this finding is warranted.