

Carfilzomib induced Alveolar Hemorrhage

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Background: Multiple myeloma is a malignancy characterized by an abnormal accumulation of clonal plasma cells in bone marrow. Carfilzomib is commonly used as a medication for relapsed and refractory multiple myeloma. It is well known to cause a myriad of side effects including pulmonary toxicity.

Case Report: Our patient presented with severe shortness of breath, nausea, diarrhea without signs of hemoptysis that started the evening after chemotherapy infusion 3 days prior to admission, which included carfilzomib, pomalidomide, and dexamethasone. She was found to be severely hypoxemic and required high flow oxygen in the emergency room. Computerized tomography (CT) scan of the patient's chest showed findings concerning for pulmonary hemorrhage.

Conclusion: Carfilzomib has multiple known side effects including peripheral neuropathy, herpes zoster reactivation, hepatotoxicity, thrombocytopenia, neutropenia, pulmonary toxicity, and heart failure. Unfortunately, there are limited treatment options in patients with pulmonary hemorrhage outside of reducing inciting factors and limiting hypercoagulability. In our case, we suspect carfilzomib induced alveolar hemorrhage in the setting of ongoing multiple myeloma resulted in this patient's severe anemia and acute hypoxic respiratory failure on admission. Our case report represents an uncommon pulmonary side effect of carfilzomib with limited prior documentation.