Recurrent Interstitial Pneumonitis and Pulmonary Hemorrhage Secondary to Amiodarone Toxicity

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Introduction
Amiodarone is a commonly used drug with a wide range of toxicity. Pulmonary toxicity is among the most serious complications.

Case Presentation
- A 60-year-old male presented with dyspnea and hypoxemia.
- PMH includes atrial fibrillation for which he was started on Amiodarone 200 mg daily 9 months prior.
- CXR showed diffuse interstitial infiltrates.
- He failed a course of antibiotic treatment for 10 days.
- High resolution CT scan showed bilateral ground glass infiltrates suggestive of Amiodarone induced interstitial pneumonitis.
- Amiodarone was stopped and he was started on Prednisone.
- Symptoms improved at one-month follow-up and CXR infiltrates resolved.
- Prednisone was tapered and stopped after 2 weeks.
- One week later, he developed hypoxic respiratory failure with hemoptysis and bilateral lung infiltrates.
- Bronchoalveolar lavage revealed 3 bloody returns.
- Transbronchial biopsy showed fibrosis (*), lipid laden (small arrows), and hemosiderin laden macrophages (large arrows) favoring the diagnosis of Amiodarone toxicity with diffuse alveolar hemorrhage.

Discussion
- Pulmonary toxicity secondary to amiodarone use occurs in 5-15% of patients.
- Manifestations range from mild to severe and even fatal disease such as ARDS.
- Most common presentation is interstitial pneumonitis accounting for one-third of patients.
- Alveolar hemorrhage is a rare complication of amiodarone pulmonary toxicity. Only a few cases were reported.
- Amiodarone is a highly lipophilic drug that avidly binds to adipose tissues, resulting in a large distribution volume and a prolonged half-life reaching 180 days.
- Pulmonary toxicity may progress despite drug discontinuation.
- Treatment includes stopping the offending drug and initiation of glucocorticoid therapy in severe cases.
- In our case, the rapid tapering of Prednisone apparently was responsible for the acute recurrence of a more severe form of interstitial pneumonitis with evidence of diffuse alveolar hemorrhage.

Conclusion
This case highlights the deleterious pulmonary side effects of Amiodarone and emphasizes the importance of slow tapering of glucocorticoids following amiodarone-induced lung injury.

References