

Introduction

- Amiodarone is among the most prescribed anti-arrhythmic medications.
- Amiodarone adverse effects rate: 15% in the first year and 50% in long term use
- Organ systems most often affected: Heart, Liver, Thyroid, Eyes, Skin, Lungs
- Amiodarone-Induced Pulmonary Toxicity (AIPT) has an incidence rate between 5–13% and a mortality rate between 10-23%.
- Risk factors: Pre-existing lung pathology, age, dosage, longevity of treatment

Case Description

- Patient is an 87-year-old man with history of atrial fibrillation
- Patient was started on amiodarone and therapeutic anticoagulation, but developed recurrent hematuria
- Patient underwent Watchman procedure and atrial fibrillation ablation, amiodarone was then stopped
- Patient developed respiratory distress days following ablation in setting of recurrent atrial fibrillation and was restarted on amiodarone
- He subsequently developed respiratory distress again and re-presented to hospital, where he was found to be hypoxemic
- CT scan of the chest at this time revealed ground glass opacities, interlobular septal thickening, traction bronchiectasis, and subpleural reticulations
- Patient required high flow nasal cannula, with progressively worsening hypoxemia
- Autoimmune and infectious workup was unremarkable aside from an elevated ESR and CRP and mildly elevated rheumatoid factor
- Empiric High dose steroids were begun for presumed amiodarone toxicity
- Despite continued care, patient had worsening hypoxemia, elected to transition to comfort care, and ultimately expired

Imaging

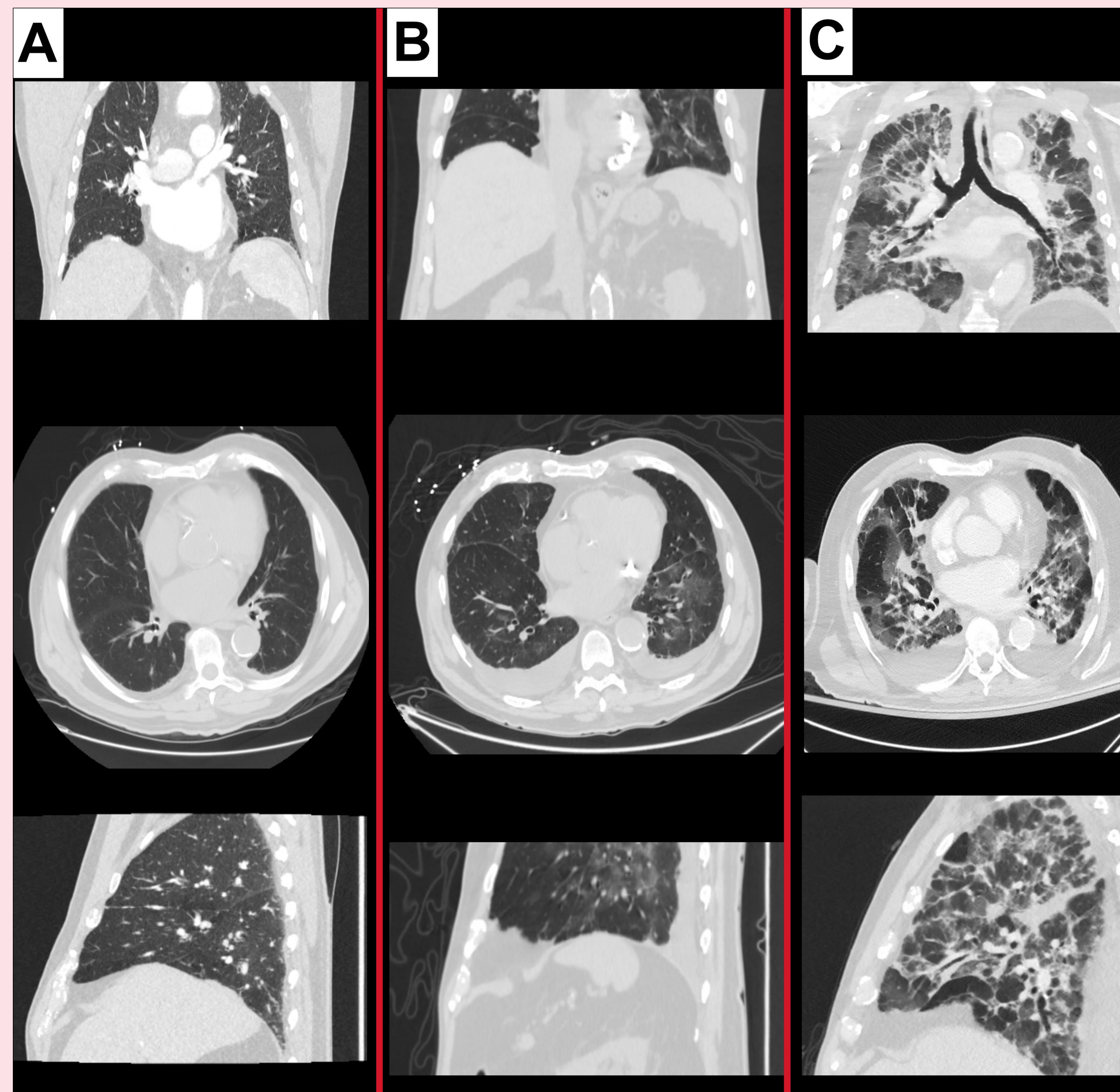


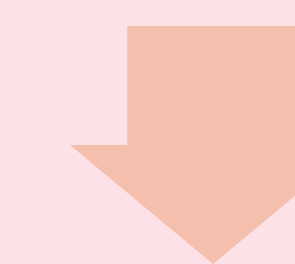
Figure 1. Radiographic imaging during patient's clinical course. (A) Cardiac CT with lung windows on day 28 of amiodarone with faint subpleural reticulations. (B) CT Abdomen on day 73 of amiodarone showing interval development of pleural effusions and worsening GGOs. (C) CT chest with contrast on day 96 of amiodarone showing significant progression of GGOs, interlobular septal thickening, persistent bilateral pleural effusions, and fibrotic changes.

Discussion

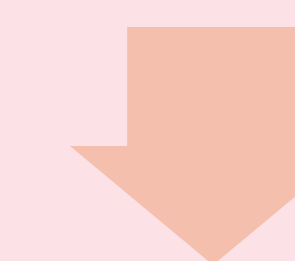
- AIPT can present with non-specific symptoms, including non-productive cough, malaise, dyspnea, and pleuritic chest pain
- AIPT typically presents after 6 months of amiodarone and is more likely in men, older patients, and those with pre-existing pulmonary disease
- Guidelines suggest baseline chest x-ray and pulmonary function tests with annual screening chest x-rays when initiating amiodarone
- Treatment involves prompt discontinuation of amiodarone and initiation of steroids

Case Timeline

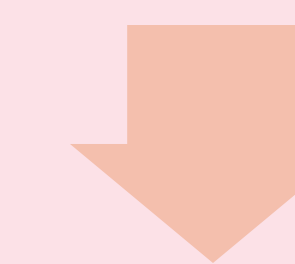
Day 1: Patient initiated on amiodarone



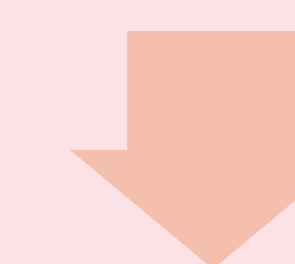
Day 71: Patient undergoes atrial fibrillation ablation and amiodarone discontinued



Day 78: Admitted for respiratory distress in setting of recurrent atrial fibrillation; amiodarone restarted



Day 95: Re-admitted due to worsening dyspnea, found to be hypoxemic, initiated on high-dose steroids for presumed AIPT



Days 101-106: Progressive hypoxemia requiring ICU transfer; patient and family decide against intubation and pursues comfort directed care; patient expires