

A CASE REPORT OF IBRUTINIB INDUCED PNEUMONITIS

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What is ibrutinib?

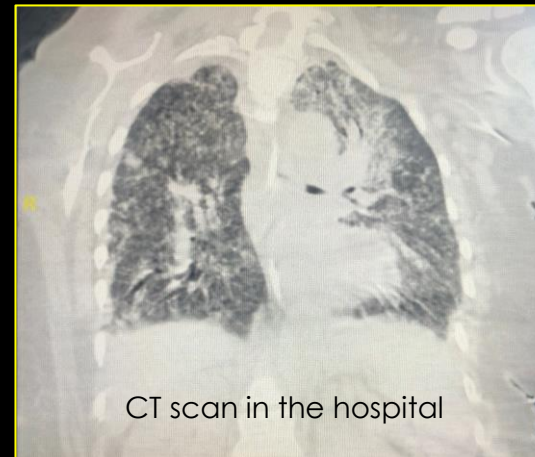
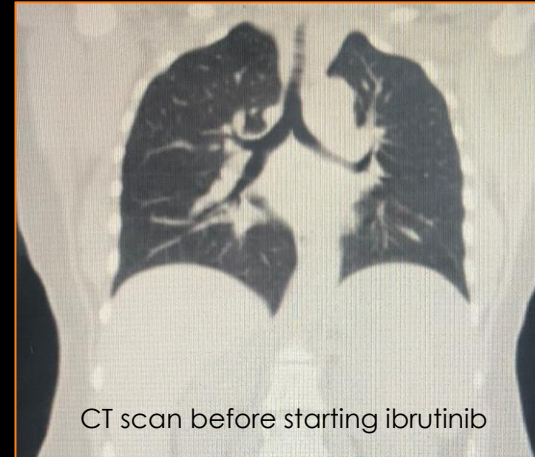
Irreversibly inhibits Bruton's tyrosine kinase, an essential component of B-cell receptor signaling, leading to diminished proliferation and survival of malignant B-cells. Ibrutinib is approved for treating leukemias and lymphomas, including chronic lymphocytic leukemia

Patient Presentation:

64-year-old female recently diagnosed with CLL and started ibrutinib therapy. Two months later, patient was admitted for two-day history of dyspnea and nonproductive cough. Patient required mechanical ventilation on hospital day 4 due to worsening respiratory distress

Work Up:

- Hypoxia, lymphocytic leukocytosis, negative COVID PCR (x2) and respiratory viral pathogen panel (RVP)
- CT chest showed new bilateral ground-glass opacities compared to CT scan three months earlier
- Treated with multiple antibiotics and antifungals without change in clinical status
- Patient underwent bronchoscopy twice and all studies including tuberculosis, histoplasma, aspergillus, coccidioides, blastomyces, pneumocystis jiroveci, fungal and bacterial cultures were negative both times



- Patient's new ground-glass opacities, which were not seen on imaging prior to starting ibrutinib
- No new medications since starting ibrutinib
- Infection did not cause the opacities
- Spontaneous pneumothoraxes (PTX) occurred on lung protective ventilation, no previous underlying condition that would lead to PTX
- Oxygenation improved after starting steroids and was weaned from full ventilator support to room air