**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.

**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 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.

**CT scan before starting ibrutinib**

**CT scan in the hospital**

**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 pneumothorax (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**