Explify Respiratory Case Report

Mycoplasma hominis Pneumonia Diagnosed by Next Generation Sequencing (Explify®)

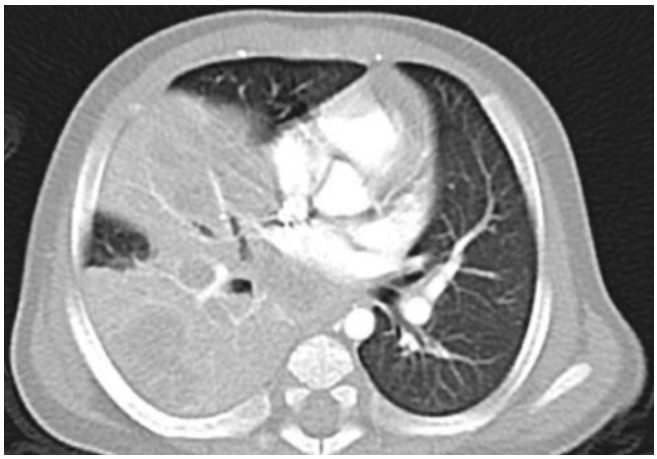
In Brief

Explify® Respiratory detected *Mycoplasma hominis* in an adolescent, immunocompromised female with severe respiratory distress and lung opacities who had negative standard of care and plasma cell-free DNA tests. She improved with directed treatment.

Case Vignette

A 16-year-old female with a history of leukemia, chemotherapy, septic shock, and Clostridium difficile colitis was seen at a California hospital for respiratory distress and admitted to the pediatric intensive care unit. Chest X-ray revealed a right middle lobe opacity. Chest CT images showed micronodules and ill-defined patchy ground-glass opacities. A battery of laboratory tests for respiratory pathogens, including galactomannan, beta-D-glucan, bacterial/fungal/mycobacterial cultures, and respiratory viral PCR panel (BAL) were negative. Next-generation sequencing of plasma cell-free DNA was also negative for known pathogens. Ultimately, a BAL sample was sent to IDbyDNA for the Explify® Respiratory test, which revealed the presence of Mycoplasma hominis, a rare respiratory pathogen. The patient improved with directed Clindamycin therapy.

AP chest film showing right middle lobe consolidation.



Representative axial cut with lung windowing showing right middle lobe consolidation.