



## IMAGES IN CLINICAL MEDICINE

# Dual Pulmonary Infections In a 57-Year-Old Male With Large Adrenal Mass

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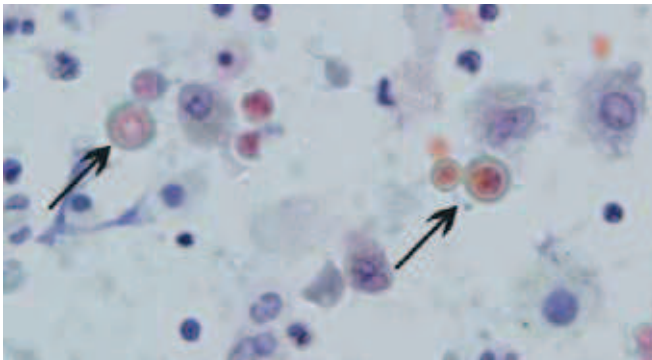
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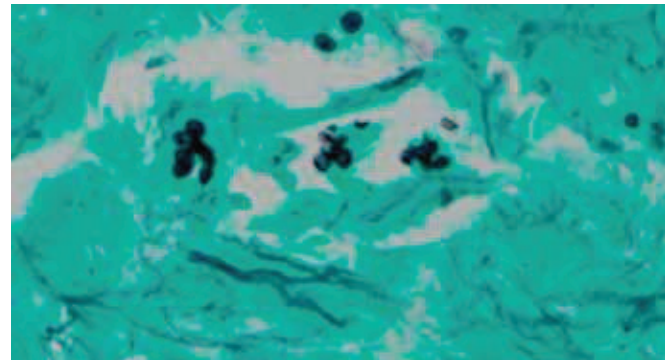
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**Figure 1.** High power photomicrograph showing *Blastomyces* with broad based budding (arrows).

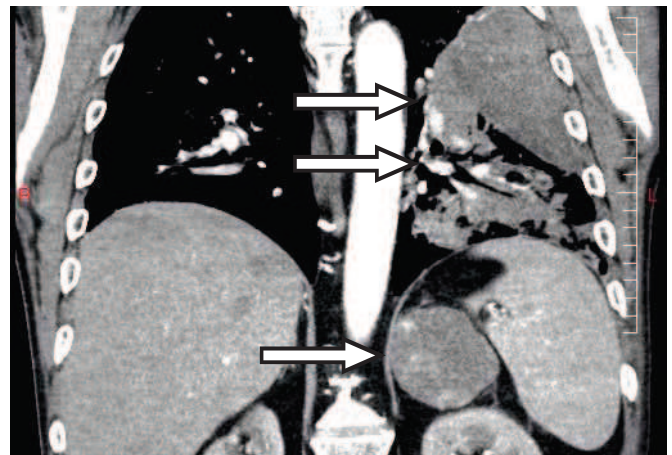


**Figure 2.** A GMS stain of the lung nodule demonstrating *Pneumocystis jiroveci*.

A 57-year-old male presented with complaints of progressive dry cough, fever, headaches and weight loss, suggesting a pulmonary infection and/or possible malignancy. Bronchial washings from the area of consolidation revealed broad-based budding yeast consistent with *Blastomycosis* (Figure 1). The CT scan showed two nodules in the right lung that might be malignant. Biopsy of one nodule showed *Pneumocystis jiroveci* (Figure 2).

*Blastomycosis* and *pneumocystis jiroveci* pneumonia are both opportunistic infections most often seen in immunosuppressed patients. This individual had no known medical condition to cause immuno-suppression.

A CT scan of the chest showed consolidation of the left lung indicating possible pneumonia (Figure 3, double arrows). Abdominal imaging demonstrated a large adrenal mass (Figure 3, single arrow). Serum and 24-hour urine cortisol levels were significantly elevated. These findings are consistent with a cortisol-producing adrenal tumor. The left adrenal mass was surgically removed, and the diagnosis of a cortisol producing adreno-cortical carcinoma was confirmed.



**Figure 3.** A CT scan demonstrating the left adrenal gland mass (single arrow) and consolidation of the left lung (double arrows).

We conclude that a cortisol-producing adrenal cortical carcinoma caused systemic immuno-suppression that resulted in a dual pulmonary infection with *Pneumocystis jiroveci* and *Blastomyces*. The pulmonary infections resolved upon removal of the adrenal mass.