

# Pulmonary Nodules Mimicking Metastasis in a Patient with Rheumatoid Arthritis: A Puzzling Clinical Scenario

Ada Shehaj\*, Arbi Pecani, Laert Gjati, Eni Allmuca, Arjan Mezini

University Hospital “Shefqet Ndroqi”, Tirana, Albania

---

## Abstract

**Background:** Pulmonary nodules present a diagnostic dilemma, particularly in patients with systemic autoimmune diseases such as rheumatoid arthritis (RA), where radiologic appearances may mimic metastatic malignancies. Differentiating between malignant and inflammatory etiologies is essential to guide appropriate treatment.

**Case Report:** We present the case of a 66-year-old female with a known history of RA who developed multiple bilateral pulmonary nodules. Initial imaging and PET-CT raised strong suspicion for metastatic disease; however, no primary malignancy could be identified. Histopathologic evaluation of a lung biopsy

revealed necrotic-inflammatory lesions with negative malignancy markers. The patient continued immunosuppressive therapy for RA, and follow up imaging demonstrated near-complete resolution of the nodules. The clinical, radiological, and histopathological findings ultimately supported a diagnosis of rheumatoid pulmonary nodules.

**Conclusion:** This case underscores the importance of considering RA patients presenting with pulmonary nodules. Multidisciplinary assessment and histologic confirmation are important to avoid misdiagnosis and unnecessary oncologic treatment.

**Keywords:** Rheumatoid arthritis; Pulmonary nodules; Metastasis carcinoma; PET-CT; Lung biopsy; Immunosuppressive therapy; Autoimmune disorders.