Case (066) Lung abscess

Authors O.m. Sanz De León, A. Vicente Bártulos, E. García Casado, I.

Pecharromán De Las Heras, C. Campos, M.d. López Parra.

Centre Ramón Y Cajal.

CASE PRESENTATION

A 65-year-old man with abdominal pain, suggesting cholecystitis and cough.

Simple radiography suggests a mass. CT shows a mass of 3.6 cm in RD lobe of 9 segments, broad contact with visceral pleura and hypodense center, and mediastinal lymph nodes, not shown. Without a thick wall or internal nodularity, our differential diagnosis should include the neoplastic, infectious, thromboembolic or immunological etiology.

In the clinical committee, we decided to perform a TEP-CT, SUV max. 2.7, suggested an abscess, an overinfected heart attack, or a septic pulmonary embolism. Results of microbiology: Propionibacterium acnes.

Patient treated with antibiotic therapy. Diagnosis: Two months after the therapy, the mass was cavitated and smaller, showing a pneumatocele secondary to lung abscess.

DISCUSSION

Key points: central hypodensity suggests necrosis, some key points to distinguish between malignancy or not, are

- The maximum width of the wall: <4 mm is benign and > 15 mm malignant,
- The nodularity and irregularity of the internal wall suggest malignancy,
- Well-defined margins, satellite nodules, consolidation or ground glass suggest a benign process.

Differential diagnosis of cavity lesions:

- Neoplastic: bronchogenic carcinoma, metastasis, lymphoma
- Infectious: bacterial, fungal, parasitic.
- Immunological: Wegener's granulomatosis, rheumatoid arthritis, sarcoidosis.
- Thromboembolic
- Septic embolism

Pulmonary abscess is produced by anaerobic or microaerophilic oral bacteria and usually polymicrobial. In hospitalized patients, it is located in posterior segments of the upper lobes or in upper segments of the lower lobes. In ambulatory patients, it is located in right or lower middle lobes.

Commonly in the right lung, if it is an initial internal fluid, it can simulate a mass. Spherical cavity with irregular thick wall.

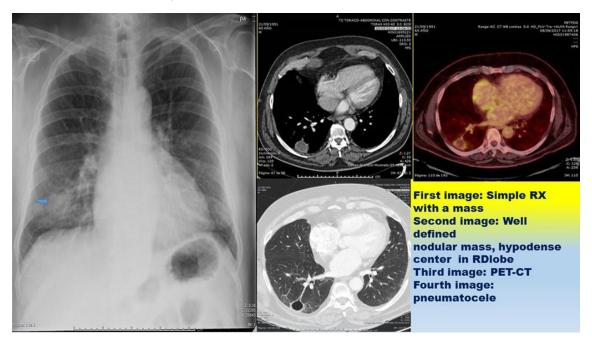
Common air-liquid level.

Pericavity opacification and empyema are also frequent.

There were no typical signs or other findings suggesting a diagnosis other than infectious

CONCLUSION

the first diagnosis in a lung mass in an elderly patient is of neoplastic origin, depending on the density and signs of the wall, the result of other studies such as SUV and evolution, the differential diagnosis may change.



BIBLIOGRAPHY

- Christopher M.W. et al. Imaging Pulmonary Infection: Classic Sins and Patterns. AJR; 2014; 202: 479-92. https://doi.org/10.2214/AJR.13.11463