

Pulmonary Nodule – A diagnostic surprise!

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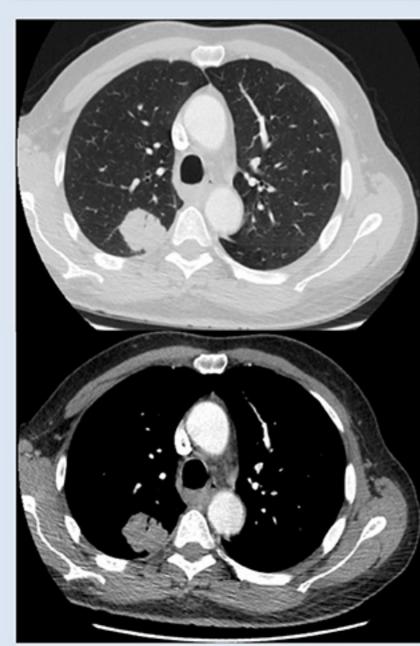
Introduction

How do we interpret the appearance of lung nodular lesions after upper right lobectomy 8 months ago for a large cell neuroendocrine lung carcinoma?

Case Summary – History

- 64-year-old male
- Ex-smoker (~20 YP) for over 10 years
- Without occupational exposure to respiratory toxins
- ➤ January 2017 right anterior hemithorax chest compression Chest X-Ray
 - Recomandations: Toracic CT Scan with contrast.
- Toracic and Abdominal CT scan with contrast and bronchoscopy with bronchoalveolar lavage were performed in the same month.
 - Conclusion: Upper right lobe malignant tumor.
- ➤ February 2017 right upper lobectomy with mediastinal lymphadenectomy HP exam: Large cell neuroendocrine lung carcinoma staged T2aNOMO
- ➤ March July 2017: 4 chemotherapy courses.
- ➤ July 2017: Oncological reevaluation — Stained glass at the LIS level, favorable CT appearance (no signs of tumor recurrence, no secondary determinations)









Case Summary

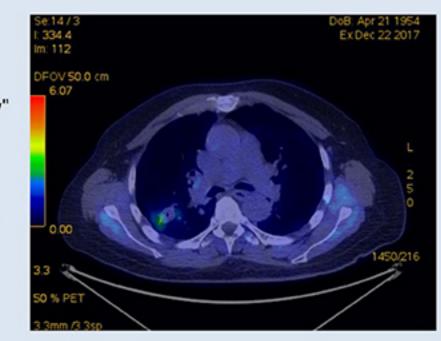
- Presentation: September 2017: chest pain on the right side, persistent febrile syndrome – antibiotic treatment is initiated with the recommendation of complete diagnostic investigations by Chest CT scan and TB sputum examination
- Evolution: Unfavorable patient with precarious general status
- October 2017 Right basal chronic pneumonia
- November 2017 Condensation and homolateral adenopathy





December 2017

- Bronchoscopy + BAL GeneXpert MTB : Detected "Very Low"
- PET CT Partially metabolically active LID lung lesion
- CT guided biopsy puncture: Necrosis
- Exploratory thoracoscopy: Caseified epithelioid granuloma.
- January 2018: Positive diagnosis TB treatment initiation



- Favorable evolution since the positive diagnosis
- Conclusions:
- ✓ Complex patient, the association of two distinct pathologies with a possible mutual causal relationship.
- ✓ Although the patient underwent multiple high-standard investigations: 3 bronchoscopies, 4 native and contrast tomographic examinations and 1 PET-CT, the positive diagnosis was a difficult one something that does not show the limitations of paraclinical investigations.
- ✓ Always keep in mind the possible association of NBP with Tuberculosis due to several causes:
 - 1. The pre-existence of tubercular lesions that can degenerate malignantly
 - Reactivation of latent tuberculous lesions due to immunosuppression caused by both the malignant tumor and chemostatic treatment.
 - 3. Simultaneous evolution of separate pathologyes

Discussion

- Therapeutic attitude:
 - The patient was treated with 2 courses of antibiotic therapy, initially broad-spectrum, later ultra-broad with the almost complete disappearance of the symptoms.
 - Due to the unfavorable evolution of the patient it is necessary to obtain a diagnosis of certainty.
- The particularity of the case:
 - The difficulty of establishing a diagnosis of certainty, even in the conditions of increased accessibility to high-quality investigations.
- Key points:
 - Paraclinical investigations guide our clinical attitude, but they cannot always provide the answer we are looking for.
 - In order to maximize the quality of the medical service, they must use every resource to help us establish the diagnosis of certainty endoscopies, imaging investigations, surgical interventions and laboratory examinations.
 - The therapeutic attitude must be dictated by a multidisciplinary team so that the patient's benefit is maximal - in the present case: Pneumology-Oncology-Thoracic surgery-Infectious diseases.

References

- 1. Marius Nasta Pneumology Institute Bucharest Patient Archive.
- 2. European Union Standards for Tuberculosis Care 2017
- 3. ESMO CLINICAL PRACTICE GUIDELINES: LUNG AND CHEST TUMOURS
- 4. The effect of anti-cancer and anti-tuberculosis treatments in lung cancer patients with active tuberculosis: a retrospective analysis
- 5. Cancer or Tuberculosis: A Comprehensive Review of the Clinical and Imaging Features in Diagnosis of the Confusing Mass