

## PEER-REVIEW REPORT

**Name of journal:** World Journal of Clinical Cases

**Manuscript NO:** 65435

**Title:** Manifestation of severe pneumonia in anti-PL-7 antisynthetase syndrome and B cell lymphoma: A case report

**Reviewer's code:** 06058344

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Belgium

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-04-03

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-04-04 09:47

**Reviewer performed review:** 2021-04-05 15:21

**Review time:** 1 Day and 5 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
<b>Re-review</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## SPECIFIC COMMENTS TO AUTHORS

See comments in file

The rarity of anti-synthetase syndrome associated with anti-PL7 autoantibodies, associated with severe - and fatal - interstitial pneumonia and B lymphoma is well documented.

The figures are not available.

- Line 10 : “It is, however, rare to observe severe pneumonia as the first clinical manifestation in ASS patients, associated with B cell lymphoma.” The association between SSA and interstitial pneumonia is frequent and it is, moreover, a prognostic factor. In the SSA, lung damage is very common compared with others myopathies. The clinical course is generally more rapid and more severe. The association with lymphoma is rare.
- Line 15 : “A chest computer tomography (CT) radiograph revealed bilateral diffuse ground-glass infiltrates in both upper fields, left lingual lobe and right middle lobe. Initially, the patient was diagnosed with severe community-acquired pneumonia and respiratory failure.” This is not the classic radiological appearance of bacterial community-acquired pneumonia. In times of pandemic; no test for SARS-CoV-2 is described (such as PCR, antigen or serology). Especially that there are associations between Covid-19 and ASS.
- Line 18 : why use of broad spectrum antibiotics as first line empiric antibiotherapy for a community acquired pneumonia ? Are there any risks factors for carrying multi-resistant bacteria ?
- Line 33 : about the mechanic’s hand ?
- Line 42 : “Previous studies have shown frequent involvement of the lungs, but not

muscular involvement while the other symptoms associated with ASS such as Raynaud's phenomenon were rare" With the anti-PL7 ? Muscle involvement seems to be the rule in dermatomyositis. The diagnosis is sometimes difficult: negative CPK, negative myogenic damage on electromyography, need to monitor troponins I

- Line 65 : "Chest CT showed bilateral diffuse ground-glass infiltrates in both upper fields, left lingual lobe and right middle lobe (Figure 1C). At first the patient was diagnosed with severe community-acquired pneumonia with respiratory failure. He was put under ceftizoxime antibiotics, which was changed to meropenem (1g every 8 hours) plus moxifloxacin ( 0.4g daily), and fluconazole injections ( 200mg daily)." Same remark as line 18 ; why using Meropeneme as this stage ? Why using Fluconazole (with small dosage) ?
- Line 78 : "the CK or CK-MB were within the normal range" : How to explain that these values are negative despite the final diagnosis of ASS ?
- Line 83 : "Sputum culture results showed 7 respiratory viruses and blood capsular polysaccharide antigen of cryptococcus neoformans" Is viral culture performed routinely on sputum? Which are the viruses detected? Is there any treatment for these?
- Line 86 : "The concentration of blood tumor markers was" Why assay tumor markers? This is not recommended in the diagnostic process.
- Line 92 : "NGS data from the broncho-alveolar lavage fluid showed the presence of Acinetobacter baumannii (30 series) and enterobacter cloacae (5 series). On the other hand, microbiological assessment provided no reliable evidence for viral, fungal or tuberculosis infection under sputum and BALF cultures" What is "NGS" abbreviation ? Microbiological analysis shows microorganisms or not ? Contradiction that I don't understand. Furthermore, what did show the anatomy-pathologist of bronchoalveolar lavage ?
- Line 97 : We then changed the antibiotics to cefoperazone/sulbactam (2g every 8

hours) plus Tigecycline (100mg loading dose, followed by 50mg every 12 hours) to cover for a resistant Gram-negative Bacilli. Antibiotic therapy is extended for the second time despite negative microbiological results ? Why ?

- Line 107-111 : “We then considered inflammation of the lymph nodes.” “we presumed an infectious/inflammatory disease. » Why is a hypercaptive lymph node biopsy not performed?
- Line 112 : “In addition, the patient developed a mild heliotrope rash” Others cutaneous signs such as Raynaud ? chilblains-like lesions ? acrocyanosis ? ulcers ? necrosis ?
- Line 118 : Indication of a muscular RMI ? If not performed, why ? And about nailfold capillaroscopy ?
- Line 120 : “bone marrow biopsy results revealed high invasive B cell lymphoma in the bone marrow, which was confirmed by bright CD138 reactivity on immunohistochemistry assays “ Is it a second bone marrow biopsy than the first (normal) mentioned in line 108 ? Why a second bone marrow biopsy is performed ?
- Line 125 : “The patient finally succumbed to respiratory failure, three days after the diagnosis.” The authors mention the administration of methylprednisolone: for how long? After the diagnosis; has the anti-inflammatory treatment been changed?
- Line 135 : “Whereas PM/DM is frequently accompanied with interstitial lung disease (ILD)” Contradictory with line 10 (see comment above)
- Line 157 : “A retrospective review of 32 PM/DM patients with hematological malignancy indicated that the top three malignancies are B-cell lymphoma (62.5%), T-cell lymphoma, and Hodgkin's disease. The study also suggested that PM/DM often precedes the onset of hematological malignancy 【15】 » Contradictory with line 156 : “Non-Hodgkin’ s lymphoma (NHL) and other hematologic neoplasms associated with PM/DM (especially ASS) are relatively rare” and line 165 : “literature of anti-PL7 ASS

and its association with lymphoma remains very limited” , or need reformulation.

- Line 179 : “difficulty to distinguish the disease from severe community acquired pneumonia” Clinical and radiological presentation does not suggest community-acquired pneumonia which should progress well under first-line empiric antibiotic therapy !
- A general comment / paragraph on diagnostic and therapeutic management is missing ; exemples of references :
  - o Witt L, Curran J, Strek M. The diagnosis and treatment of antisynthetase syndrome. Clin Pulm Med. 2016;23(5):218-226.
  - o Cavagna L, Trallero-Araguas E, Meloni F, et al. Influence of antisynthetase antibodies specificities on antisynthetase syndrome clinical spectrum time course. J Clin Med. 2019;8(11):2013.
  - o Baccaro A, Berhens Pinto G, Carboni R, Shinjo S. The clinical manifestations at the onset of antisynthetase syndrome: a chameleon with multiples faces. Reumatismo. 2020;72(2):86-92.